Levitan,
'45

BOSTON UNIVERSITY

GRADUATE SCHOOL

Thesis

GOVERNMENT PRICE CONTROL

by

Leon B. Levitan
(A.B. University of Maine, 1938)

submitted in partial fulfilment of the
requirements for the degree of
Master of Arts

1945

Approved

by

First Reader . . . . Charles P. Huse
Professor of Economics

Second Reader. . . . . Mack Donaldson
Professor of Economics

[illegible]

[illegible]

[illegible] . . . . [illegible]
[illegible]

[illegible] . . . . [illegible]
[illegible]

TABLE OF CONTENTS

OUTLINE

I Introduction

II Meaning and Development of Price Control

III Control Through Valorization and Government Agreement

- 1. Valorizations
    - a. Brazilian Coffee Plan
    - b. Control of Silk in Japan
    - c. Federal Farm Board
- 2. Control by Government Agreement
    - a. International Tin Agreement
    - b. International Control of Rubber
    - c. The Chadbourne Sugar Plan

IV Price Fixing in the United States

- 1. Price Fixing During World War I
    - a. United States Food Administration
    - b. United States Fuel Administration
    - c. War Industries Board and Price Fixing Committee
- 2. Price Fixing Under the N.R.A.

V Direct Price Fixing

- 1. Minimum Price
- 2. Maximum Price
- 3. Range of Prices
- 4. Fixed Price Relationship

VI Indirect Price Fixing

a. Destruction

b. Production control

2. Limitation of Supply In A Particular Market

a. Exports

b. Imports

c. Surplus manipulation

3. Limitation of Demand

a. Rationing

b. Taxation

c. Voluntary or forced savings

VII Price Control in the United States--World War II

1. Legislation and Application

2. General Maximum Price Regulation

3. Price Fixing in the Wearing Apparel Field

VIII Conclusions.

CHAPTER I

INTRODUCTION

Intervention by governments in the operation of economic machinery has been expanding widely in every country within the past two decades. The ideals of pure laissez-faire are still adhered to, but in practice laissez-faire has been as dead as the proverbial duck. In the United States, for example, we still hold to the ideals of freedom of enterprise, economic liberalism, freedom from government interference, yet we are finding it increasingly difficult to achieve these ideals. On the contrary we are retrogressing, so to speak, more and more from them as time passes. Witness the attempts made by government during the thirties to mitigate the effects of the depression. N.R.A., relief, home loans, farm subsidies, tariffs, control of security exchanges, pump priming and many others. Witness the attempts to avoid the ill effects of an over expanded economy and yet win the war in the present emergency. Allover price control, wage control, priorities, allocations, high taxes. Out of the maze of economic events there has emerged a definite pattern, a pattern which indicates that laissez-faire, regardless of the honored position it has held in the past, is losing its hold. This is important particularly for the democracies, for in the democracies these changes represent the will of the people,

[illegible]

[illegible]

[illegible]

and the people are now realizing that government with a minimum of interference is becoming an impossibility.

From among the numerous methods of government interference price fixing is often singled out and isolated as a peculiar phenomonon. For purposes of analysis this conception may have some value, but it is more accurate to view government price fixing as part of a broad and extensive movement which is affecting all phases of economic life. The area of free competition has been steadily whittled down. Prices have become increasingly inflexible. This has been partly due to new controls instituted by governments and partly to rigidities introduced by industry itself. The nature of industrial development, with its emphasis on mass production, fixed overhead costs, and its concomitant features, organized labor and rigid wages, has also contributed to the inflexibility. During periods of depression agricultural interests have viewed with envy the relative stability of industrial prices, and have agitated for government action to correct the inequalities. Restrictions in agriculture have been used by other interests as a lever of bargaining power to obtain new controls. Thus the pattern which has emerged is not one of price control only, but rather a pattern of increasing government guidance of economic machinery, in which price control is only one phase. Much of the expansion of government activity in economic affairs has taken place in a haphazard manner without the value of past experience and

through investigation of consequences. It is our purpose to evaluate price control in this light. We will look at its history, analyze it objectively, see how it is working in the present emergency, but in doing so we will remember that it is not a peculiar economic phenomonon, but rather one phase of a general world trend in economic life.

Before proceeding further it will prove helpful if we define exactly what we mean by government price fixing. Government price fixing as we shall consider it in this study will refer to that action which is <u>deliberately</u> taken by a national or local government to influence the movement of price. In the early history of the United States the tariff was used as a source of revenue. It was an action deliberately taken by the government and to the extent that it was established higher than world price it influenced the movement of domestic price. However we shall not consider this as government price fixing, for the avowed purpose was to raise revenue and the movement of domestic price was a secondary result of minor importance. In the period before World War I the tariff was used as a means to raise domestic price so as to perpetuate some of our domestic industry which otherwise would have had to succumb to world competition. Here was a deliberate action on the part of the government to raise prices to protect home industry. In the sense in which we use the term this was government price fixing. The intent was to increase certain prices and it was fairly established beforehand that if these

prices were increased certain industry would survive or certain industry would be fostered.

Price fixing has been adopted to achieve a number of different purposes. As has been suggested above it may be used to protect or foster home industry. It may be used to aid a particular group such as the farmers, or it may be used to mitigate the effects of a depression or to fight inflation. In the present emergency it is being used to fight a war. The attempt is being made to keep prices down so as to avoid a possible inflation and to keep to a minimum the cost of the war. At the same time price fixing is being used to increase production in existing industry and as an aid in the development of new industries. The purposes for which it may be used are numerous and depend largely on the conditions prevailing at a particular time and the results desired. There are those who hold that price fixing can accomplish no purpose. They maintain that prices are symptoms reflecting troubled conditions, and that price fixing merely changes the symptoms without having any effect on the conditions causing the symptoms. Let me clarify my stand on this point at the outset. I must disagree. As we shall see numerous attempts at price fixing have failed. But examination will reveal that there are valid reasons for the failure; either faulty economic reasoning or inefficient and inadequate administration. Within limits it is possible for deliberate government action to influence the movement of prices to accomplish a particular

purpose. We do not suggest that price fixing is an economic cure-all, but it does have a large element of value and can be used wisely or unwisely to accomplish a particular purpose.

The term "price fixing" implies a simple process of arbitrary price determination. Analysis of the subject matter, however, reveals that the process is far from simple and the ramifications almost endless. Arbitrary price fixing is indeed one method, but, because of the interdependence of prices and the dynamics of the economic system, it is in itself rarely a satisfactory one. More often it is necessary to control either supply or demand or both. This means production controls, surplus controls, tariffs, or rationing, taxation and forced or voluntary savings. There are a multitude of devices or mechanisms which must supplement direct price fixing to make it work. In practice the emphasis is of necessity more on the indirect means than on the direct. While we shall examine the direct methods and observe the economic consequences, our emphasis will be more on the indirect methods.

Our analysis will examine objectively the more important direct and indirect methods of price control. They are as follows:

I Direct Price Fixing

1. Minimum Price
2. Maximum Price
3. Range of Prices. (Maximum and minimum are both

fixed)

4. Fixed Price Relationship

II Indirect Price Fixing

1. Limitation of Supply
    a. Destruction
    b. Production control
2. Limitation of Supply In A Particular Market
    a. Exports
    b. Imports
    c. Surplus manipulation
3. Limitation of Demand
    a. Rationing
    b. Taxation
    c. Voluntary or forced savings

Each of these methods will be discussed for the value they have in themselves and in relation to the broader problems of price control. After this analysis we shall turn to some of the present day problems of price control and observe how they are being met. Many new and far embracing methods have been developed and they deserve attention.

The purpose of the study should by now be apparent. We shall attempt to examine the past history of price control, analyze it objectively, and see how it is working in the present emergency. We should then be able to evaluate it as a tool in the broader trend of government interference.

CHAPTER II

MEANING AND DEVELOPMENT OF PRICE CONTROL

Early History

Government price control is not new. In the tablets of Hammurabi, King of Babylon, are carved the oldest price regulations known to man. These laws, cut in stone about 2200 B. C. were extremely rigid. They established minimum and maximum prices which were absolute and their jurisdiction extended to include all Babylonian business. Some of these laws are listed below:

> Compulsory prices, interest, and wage rates--from the Code of Hammurabi, King of Babylon.[1]

> If a merchant has loaned grain or money on interest, he takes for each $8\frac{1}{2}$ bushels of grain, about 2.83 bushels of grain as interest: per shekel of silver a sixth plus one-sixtieth shekel on his interest.

> If a builder builds a house for a man and completes it, that man shall give him two shekels of silver per eighteen yards of house as his wage.

> To surgeons for lucky operations "with a bronze lancet":

On full citizens	10 shekels of silver
On freemen	5 shekels of silver
On slaves (to be paid by owner)	2 shekels of silver

> To veterinary physicians for operation on an ox or a donkey: one sixth of a shekel of silver.

---

1. Hirsch, J., PRICE CONTROL IN THE WAR ECONOMY, Harper & Bros., New York, 1943, p. 5.

Wages for a field laborer	66.6 bushels of grain (dry measure) annually
Wages for a herdsman	50 bushels of grain annually
Wages for a tailor	5/360 of a shekel of silver a day

In the Mosaic and Brahaminic laws are found regulations limiting and regulating the economic life of the people. There were regulations against false weights and measures and against adulteration. There were provisions against speculation and monopoly. The Rabinnical law disapproved of raising market prices by speculative means. In time of famine it controlled export of food and forbade storing; all must be put on the market. Along with these ideas was a limitation of the profit of retail storekeepers to 16-2/3 per cent.[1] The Brahmanic law also had similar provisions. It penalized merchants for underselling or for selling an article for more than it was worth. A theme of economic control pervaded these laws, but the object was mainly religious, for if one followed them he gained not only economic well being, but more important a consciousness of spiritual perfection and of a good life.

This theme of economic control extended through the Greeks and Romans, through the Middle Ages down to about the beginning of the nineteenth century. In this time fixed

1. Haney, L. H., HISTORY OF ECONOMIC THOUGHT, Macmillan Co., New York, 1940, p. 45.

prices either determined or influenced all commercial activity.

Probably the first over-all price ceiling that was tried was the edict of Roman Emperor Diocletian in 301 A.D.[1] This decree put an over-all ceiling on wages, prices and rents. Violations were punishable by the supreme penalty of death, but despite this severe penalty the system did not last. The resulting disaster is indicated in the following quotation.

"The results of this edict according to the historian Lactantius showed the Emperor that no human will could prevail in matters like these against the force of circumstances. The dealers, required to sell at a lower price than they had paid, concealed their commodities; scarcity increased, street brawls followed in which blood was shed and it became necessary to let the law drop into disuse.[2]
This failure did not prevent the Emperor Julian from attempting a similar experiment sixty years later, with the same results.[3]

In the life and writings of the Greeks there is also found evidence of control. Aristotle, in the Politics and Nicomachian Ethics, expounds his ideas of money and value. Plato also wrote along similar lines. These discussions were representative of life of that time for actual business relationships were governed by rules and regulations not unlike those

---

1. Backman, Jules, GOVERNMENT PRICE FIXING, Pitman Publishing Corporation, New York, 1938, p. 155.

2. Ibid.

3. Ibid.

of the Hebrews and Hindus. There were, for example, inspectors of weights and measures, inspectors of goods on sale; the price of salt was regulated and the exportation of wheat was controlled as was the slaughter of sheep and goats at lambing time.[1] These controls attempted to substitute for objective exchange phenomona a subjective concept of valuation which was to be used as a criterion in economic matters. The attempt was to place exchange on a high ethical plane.

The ethical concept of price which was developed by the Greeks continued and was extended in the Middle Ages. The Church fathers discussed these problems for over a thousand years. All life was controlled by the Church which promulgated detailed canons governing almost every phase of life. This was possible in view of the decentralization and lack of development. The institutions of independent domestic economy and competition had not yet emerged so that prices freely determined by market forces seemed unnatural. The Church expounded the doctrine of just price (justium pretium) which was more natural. Briefly stated the doctrine of just price was that every article has some price which represents its value and this price is absolute. It is to be determined and made objective on the basis of common estimates of the cost of production.

---

1. Haney, Op. Cit., p. 59.

On the subject of interest the Church fathers were particularly effusive. They devoted a large part of their discussions to the question of whether interest can be considered a just cost. As late as 1311 it was declared illegal on the belief that to take interest for a loan of money was like charging more than the just price. In the words of St. Thomas Aquinas, the most noted of the schoolastics, "To take usury for a loan of money is in itself unjust; for it is to sell what does not exist, which is an inequality, and, therefore, an injustice." This strict control of life by the church was possible only in an undeveloped society. As the world emerged from the Middle Ages and as the institutions of an exchange economy developed, this control waned and the Church gradually had to alter its canonical law to conform to actual conditions. Loans at interest were recognized under certain conditions and these conditions were slowly modified until they finally conformed to the general practice.

From the Middle Ages to the period of the American and French Revolutions, the Guild System prevailed in most countries. It had as its background a rigid system of control of wages and prices. The guild was the central unit in this system. It was an organization of all the population of the town who engaged in the business of selling. The principal reason for its existence was to preserve to its members monopoly of trade.[1] No one not in the guild of the town

---

1. It also maintained quality at a high level.

could buy or sell there except under conditions imposed by the guild. There were regulations defining the difference in position between the master, journeyman and apprentice. Wages and hours of labor were regulated. There were rules of sale which prohibited cornering of the market.[1] The organization was one of strict control and though it passed through several stages merchant, crafts, and non-industrial, the factor of control was dominant. With the dawn of the renaissance the power of the guild passed to the town and finally to the national state.

As the church influence waned and as the national states emerged, there grew in the minds of men certain economic ideas which are lossely called mercantilistic. As a doctrine Mercantilism was first systematically developed by an Italian writer, Serra in 1613. His ideas were grasped and developed to their fullest extent by the English writers, particularly William Petty, Sir Josiah Child, Thomas Mun, and it was the English who adopted these mercantilist practices into their economy and utilized them to the fullest extent. The chief purpose of Mercantilism was to make the state strong. The economic basis of strength was wealth which consisted mainly of the precious metals gold and silver which were referred to as 'treasure'. The means

---

1. Cheyney, E.P., INDUSTRIAL AND SOCIAL HISTORY OF ENGLAND, Macmillan Co., New York, 1923, pp. 50-62.

adopted to secure the desired treasure was that of 'forraign trade', the idea being that no matter how great a nation's foreign trade might be, it was of no value unless there was a considerable excess of exports over imports so that the precious metals would flow into the country. Various measures of control had to be invoked in order to carry out this plan. There was strict control over exports and imports and manufacturing was encouraged over agriculture. There were laws which aided the utilization of waste lands so that those things then imported might be produced at home. By 'corn laws' which prohibited the importation of grain when the price at home fell below a certain level, it was hoped that agriculture would be stimulated so that the nations would become self-sufficient and support a large population. Control by the state of economic matters was practiced, but it was more of a social planning than strict control over production and prices. Although industry was regulated for the purpose of extending foreign trade, it may be truly said that there was more freedom in economic life during this period than at any other time to this point.

With the passing of the Mercantilist era the world entered into a period of laissez-faire, a period where control of entrepreneurial life was practically nil.[1] All price

---

1. Control of entrepreneurs. Labor was regulated more strictly than heretofore.

fixing and price control were abolished and other obstacles to employer economic freedom were curtailed. The free price became the natural regulating force in all business activity and the ultimate consumer and his purchasing power determined what goods and services were to be produced and in what quantities. This was basically the system expounded by Adam Smith in his "Wealth of Nations" and it was under a similar economy that great strides in economic evolution were made. It was during this era that governments declared their determination to abstain from interference with prices and most of them honestly tried to do so. There were exceptions of course, but the important thing to note is that free competition, free prices and free markets made during this period of approximately 150 years a definite contribution to economic progress and to the development of higher living standards.

There are several isolated examples of control which should be mentioned. An attempt to fix prices was made during the French Revolution in the 1790's and despite the liberal use of the guillotine this failed. In 1777 Mass. attempted to fix prices of commodities and labor; but it found the problems of enforcement so great that it had to repeal the law the same year. Pennsylvania also attempted a similar experiment about the same time which was also unsuccessful.[1]

---

1. Backman, Op. Cit., p. 156.

Throughout history until comparatively recent times control of one sort or another has been the dominant motif. With the advent of the era of laissez-faire price fixing and control dropped into temporary oblivion.

CHAPTER III

CONTROL THROUGH VALORIZATION AND GOVERNMENT AGREEMENT

With the dawn of the twentieth century price control was once again drawn from the economist's bag of tricks and applied to a degree unparalleled in previous history. It was about this time that the effect of the rapid increase in the arts through new invention began to level off. Economically the development of the world had reached a plateau stage and economic frictions had arisen which made impossible a smooth operation of the laissez-faire economy. In order to facilitate the function of the free system various schemes of control were adopted and applied, some by governments and some by individuals. These schemes on the whole resulted in failure, but we examine them that we may learn from the lessons of the past something which will be of aid to us in formulating the policies of the future, for it is evident to us now, in view of recent world history, that price fixing and control in one form or another is going to be with us for some time to come and regardless of the merits pro or con we must learn the intricacies of the different methods so that we may be able to attain a reasonable degree of smoothness in application.

The schemes of price fixing fall into two broad classifications, those commonly referred to as valorizations

and those which are accomplished through agreements between governments. We shall examine the most important of those schemes which have been utilized.

Valorizations

All price fixing experiments are commonly referred to as valorizations; actually the term applies to a particular type of price fixing. Technically valorizations attempt to control the supply of a commodity, eliminating temporary excesses which would depress prices below their normal long run level or using surpluses accumulated in time of abundance to offset a new scarcity which might cause an excessive rise in price. The primary purpose is not to fix a definite price and then to maintain it, but rather to apply measures of control on production so that excessive fluctuation of prices may be eliminated. In the words of the Federal Farm Board; "Not stabilization in the sense of rigid fixation or leveling of prices, but stabilizing in the sense of limiting fluctuations and cushioning the shocks from severe fluctuations."[1]

Valorization operations may attempt to control the flow of a commodity for a short period of time or they may operate to regulate the supply for a long period of time. The more significant type is the long run type, that which is concerned with smoothing out the effects of irregular production

---

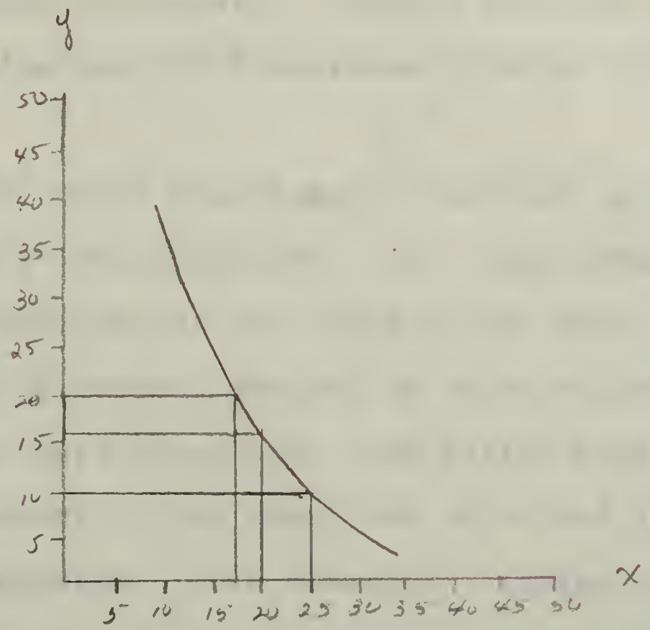
1. First Annual Report of Federal Farm Board, p. 24.

over a period of time. This type is usually applied to agriculture so that the effects of irregular crops resulting from varying weather conditions over a period of years may be stabilized. The problems in agriculture are great, for once the crop is planted the results depend to a very large extent on outside forces. For example in a program of curtailment, good weather may result in a larger crop than anticipated thus counterbalancing the decrease in acreage planted, or in a program of expansion bad weather may curtail an anticipated bumper crop. When applied to manufacturing the problems, are not by comparison as great, since it is relatively easy to control the number of units produced.

Valorizations are not uncommon; many experiments have been attempted. In order to simplify our discussion we shall limit ourselves to three of the most well known situations, Brazilian coffee, Japanese silk, and the United States Federal Farm Board.

1. Brazilian Coffee. The incentives for the control of coffee in Brazil are to be found in the conditions of demand to which coffee is subject and the important part it plays in the economy of that country. Coffee, not unlike many other of nature's products, is subject to conditions of inelastic demand. Elasticity of demand is a measure of the change of amounts purchased in response to a change in price. Inelastic demand means that a sharp decline or rise in price is not accompanied by significant increase or decrease in the amounts

taken. The following graphic illustration will make this clear.



It can be seen that with decreases in the price the total amount spent is decreasing, or to put it another way, if there is a sudden increase in the amounts offered as there would be in the case of a bumper crop, then the drop in price will be so great that the net amount of income to the producers would be less. Thus in case of an abnormally large crop it is practically impossible for the producer to dispose of his crop at a reasonable price. Over a period of years the experience in Brazil was that the large crop so absorbed the vitality of the soil that it was followed by several years of

---

1. For the mathematical reader. The elasticity of demand is the rate of change of the demand curve at any given point. If the demand curve is $y = f(x)$ then the elasticity is $f'(x)$ and the marginal demand will be $y = f'(x)$.

average yield and there arose a desire among the producers for some medium which would absorb the excess crop in the abundant year and gradually release it during the less abundant years thereby eliminating the disastrous effects of sharp fluctuations in price.

The coffee experiments attempted in Brazil extended intermittently from 1906-1938. The first scheme was administered by a committee of the state of Sao Paulo. The control was featured by several methods of which valorization operations was the most important. The entire crop was purchased from the planters by the committee which had financial backing from the government. This financial backing did not prove to be adequate and a loan had to be negotiated from the British and French bankers. As a condition of the loan no additional purchases were to be made and the existing stocks were to be liquidated. The situation brought about by the World War eased conditions to the extent that surpluses were liquidated so that principal and interest on the loan were paid and several million dollars actually accrued to the Brazilian treasury.

A second valorization became necessary when in 1917-18 large crops combined with difficult shipping conditions accumulated large stocks. However, adverse weather in the next two years created short crops and allowed the government to liquidate its holdings profitably. In 1922 because of the

paralysis brought on by the post war depression the government again intervened and purchased surplus stocks with the intention to liquidate them over a period of ten years. However, fortune again favored the Sao Paulo government and the entire surplus was liquidated by the end of 1923.

The fourth coffee valorization started in 1924. The agency which handled the control was initially the Institute for the Permanent Defense of Coffee, later reorganized as the Sao Paulo Coffee Institute. Through the reorganization complete political control was obtained by the government.[1] The methods used consisted of a control of exports, regulation of shipments from the interior to the ports of exportation, purchases in the open market when necessary, and loans to planters against coffee in the official warehouses. In order to control marketing of the coffee the government made the planters ship their coffee to official warehouses from which their disposal was completely controlled by the government. In order to prevent evasion by the planters, the railroads were allowed to ship coffee only from the warehouses. The funds to finance the scheme were obtained through a tax on the export trade, a tax on the coffee carried by the railroads and the sale of bonds through foreign channels. From 1926 through 1930 it was necessary to raise over 35 million lbs. through foreign bankers and the situation became so bad that

---

1. Backman, Jules, ADVENTURES IN PRICE FIXING, Farrar & Rinehart, New York, 1936, p. 20.

a policy of destruction had to be adopted in an attempt to alleviate the situation. During the first year the destruction was executed at the rate of a million bags a month.[1] By 1938 more than 60 million bags or the equivalent of two and one half years consumption had been destroyed.[2] The final downfall of the scheme was due to a tremendous increase in the supply of coffee which was brought on by two bumper crops in three years and to an overextended financial condition. Brazilian experiments furnish excellent illustration of the futility of trying to control price over a long period of time without rigid control of production.[3]

2. Control of Silk in Japan. On numerous occasions the Japanese government has attempted to interfere with the free price of silk. Prior to 1930 there were two experiments which were mildly successful but which, had conditions been different, might have failed miserably. The first attempt was made in 1915 when the Imperial Raw Silk Co., Limited, otherwise known as Teisen Kaisha, financed by government funds began to buy up excess stocks of silk which were depressing the market price. The government entered the scheme half-heartedly and when the limited funds of the company were used up it refused to advance additional aid so that it became necessary to dissolve the company. At that time approximately

---

1. Backman, ADVENTURES IN PRICE FIXING, Op. Cit., p. 105.
2. Ibid., p. 106.
3. Rowe, J.W., MARKETS AND MEN, Macmillan Co., New York,1936, pp. 22-50.

12000 bales had been bought up, approximately one third less than the available stock. The company was faced with a hopeless situation, but fortunately for it the war boom intervened and it was possible to liquidate the stocks profitably.

In the post-war depression of 1920-21 the price of silk again collapsed. Again loans were made from the government by a company organized for that purpose and the excess silk was removed from the market. The depression, however, was short lived and the stocks liquidated within a short time. In both of these experiments the degree of dependence on foreign markets was shown, particularly the American market, for when conditions in the American market improved it no longer was necessary to control the Japanese market and previously purchased stocks were absorbed without difficulty.

By 1930 the effects of the depression in this country had been reflected in the Japanese market and the price of silk had dropped extremely low. Control was again deemed expedient and a similar plan was put into effect, except that the new plan had incorporated in it an attempt to limit the production of silk. The production curtailment program was enforced by local provincial magistrates who fearing loss of political power in their districts failed to carry out the program. By 1938 many of the snags had been ironed out and production curtailment was working as planned.

In spite of the production curtailment program the plan was not successful from a valorization point of view,

although from the point of view of waging a long war, the plan might be considered successful. This is indicated by the fact that raw silk prices reached a low point in 1934 and 1935 when at this time prices of other commodities had begun to show increases. The failure of the curtailment program to get a quick start caused huge accumulations of silk by the government so that by 1937 the silk industry was largely in government hands and its future entirely dependent on political developments.

3. Federal Farm Board. One of the outstanding adventures in price fixing in the United States was the Federal Farm Board experiment between 1929 and 1932. The Federal Farm Board had at its disposal the largest fund with which to control prices that has ever been placed in the hands of a price control authority, a fund of five hundred million dollars which was to be used primarily to support the wheat and cotton markets. The main objective of the Farm Board was to stabilize market fluctuations but it had a secondary purpose, namely to encourage and promote farmer's cooperative associations.

In its attempt to control cotton prices the Farm Board used two methods. It made loans to cooperatives so that cotton could be marketed at the proper time and it engaged in open market purchases. The theory behind the loan type of control was that loans made to the farmers through the cooperatives would increase their holding power so that they could withhold surplus stocks from the market during the

period of depressed price and release them later in an orderly fashion at higher prices. To do this loan values had to be determined for the surplus stocks held as collateral, and these loan values were usually slightly below the market price. They were, however, not sufficiently below the market price and when the price declined pressure was put on the government to take over the cotton. This the Farm Board did and as a result the government was left literally holding the bag. Although the Farm Board could have engaged in extensive open market operations, it did not do so. Many people believed that the board supported the market by making huge purchases and to the extent that this information was believed it helped in a psychological way to maintain the price. Actually, of the total of approximately 3,500,000 bales held at the peak of the control only 78,300 bales were acquired in open market purchases.[1]

By 1930 cotton cooperatives were withholding large amounts of cotton from the market by virtue of the loan policy of the Farm Board. In the first few months of the year the market price sagged to a point lower than the loan value, which was then about 16 cents per pound, and the position of the cooperatives became so bad that there was complete demoralization of prices. The handling of cooperative supplies was then turned over to the American Cotton Cooperative Association and finally to the Cotton Stabilization Corporation which

---

1. Federal Farm Board, First Annual Report, p. 39.

was formed by the government in June 1930 to ease the situation. By January 1931 the holdings of the Cotton Stabilization Corporation amounted to over 2 billion bales and though there was no increase during that year, such large holdings constituted a threat to the market and some means had to be found to liquidate them. In August of 1932 the first sales were made, and within a year, after donating about 850,000 bales to the Red Cross for which no remuneration was received, and after allowing farmers to buy up large amounts in return for promises to plow up equivalent amounts of their 1933 crop, the holdings were finally liquidated.[1]

The cotton experiment unfortunately was doomed to failure at its inception. Although the Farm Board had sufficient financial resources, there were no rigid provisions in the act of Congress for production curtailment and there was thus a steady increase in production. The Board did attempt to secure voluntary curtailment "by means of radio addresses, letters and other forms of publicity" but such means proved inadequate. One of the unfortunate results of the experiment was that with interference, the price in the domestic market was higher than that in foreign markets resulting in a decline of forty five per cent in the proportion of American cotton used in foreign countries.[2]

---

1. The A.A.A. which was formed in May 1933, handled the options offered to the farmers. Under these options the cotton was sold at 6 cents per pound and since the market price was then 9 cents it was profitable to take up the options.
2. Backman, Op. Cit., p. 116.

One of the basic lessons learned from valorization schemes is that control of prices without rigid control of production in the long run is impossible. When there occurs a price level higher than normal because of interference with the free movement by some outside force, it then becomes advantageous to the individual producer in a competitive market to increase his production inasmuch as he feels that he will be able to sell all he produces at the market price. When the price is higher than normal the incentive to produce is great and the need of control is naturally greater. The means of control must then be rigid so that there will be as nearly as possible, absolute control of the new supply coming into the market. In the absence of restrictive measures valorization must depend on adverse weather conditions to accomplish the necessary decrease in supply.

The problems of administration of valorizations are naturally many. There has been a tendency to ignore wise business practice and unnecessary losses have resulted. Loan values have set unnecessarily high. Imprudent methods of storage have incurred huge charges for storage, insurance and deterioration. These are problems which can and must be ironed out if valorization schemes are to be used with any success.

Control by Government Agreement

Control of prices by international means may be divided roughly into two broad categories; those between

producers in different countries and those between the governments of different countries. The former usually take the form of cartels which divide markets, determine policies of price and conditions of sale. Cartels are older than government agreement, the latter representing a comparatively recent development. Actually they are outside the scope of our discussion, but they are mentioned in view of the effect they have had in a war economy and the extent to which they have influenced recent price policy.

There have been comparatively few intergovernmental agreements to control price either directly or indirectly. This type of control has been the result of world trade depression and it has been applied in those industries where the dislocations were rempant even before the depression. The World War I was perhaps the greatest single factor contributing to dislocation.[1] The belligerents in their desire to conclude hostilities as quickly as possible created tremendous capacity to produce and in the postwar era this capacity far exceeded the power to absorb. The general cry was for protective tariff and economic self-sufficiency and the proponents of these measures were strong enough to put them into effect. The channels of world trade became glutted resulting in the accumulation of tremendous surpluses in some countries. Control of production and price became not desirable but necessary to ease this condition.

---

1. Rowe discussion, Op. Cit., p. 171-172.

International agreement to control world supply has been used in tin, rubber, sugar, wheat, and tea. For the purpose of our discussion we shall examine the controls of the first three commodities mentioned; namely, The International Tin Agreement, The International Rubber Agreement, and the Chadbourne Sugar Plan.

1. International Tin Agreement. The study of the control of tin is of very special interest because the scheme resulted in a fair degree of success. In the first few years of operation the price of tin doubled and it was maintained, to the outbreak of present hostilities, at a level more profitable than would have existed had the industry operated at full capacity without control.

One of the reasons for the need of control of tin arises from the nature of the demand. It is used mainly in the manufacture of automobiles and airplanes and it is used in small quantities in association with other metals.[1] The demand is limited and therefore becomes economically inelastic. If production is only slightly in excess of requirements, the price will fall severely because consumption cannot be increased as the price falls. Another contributing factor is that tin is so valuable that accumulation of stocks is very costly, thus a fall in price is not arrested by buying for stock holding. On

---

1. The development of magnesium as a substitute for tin during the war will have great effect in the postwar era.

the production side it should be noted that seventy two percent of the world supply is located in Malaya, Bolivia and Netherland East Indies[1] and thus the industry is an important factor in the economies of these countries.

The first instance of intervention was started in 1920 when the Bandoeng Pool was formed by the Malayan and Netherland East Indies governments to absorb the excess stocks which had accumulated during the war due to shortage of shipping facilities. This pool was liquidated profitably in 1925. The seeds of the recent restriction scheme are found in the attempts of certain large producers to restrict output by voluntary agreement. In 1929 these producers, representing about one quarter of the world supply organized the Tin Producers' Association and obtained the agreement of about three quarters of the industry to cooperate in curtailment. Many producers failed to keep their promises and when supplies became excessive pressure was brought to bear upon the respective governments to make the restriction compulsory. In March 1931 the restriction scheme by government agreement was started.

The original participants in the control were British Malaya, Bolivia, Netherland East Indies and Nigeria. Other of the less important producing countries were invited

---

1. Spiegel, H. W., ECONOMICS OF TOTAL WAR, Appleton-Century Co., London, 1942.

to participate on favorable terms. The primary object at that time was to prevent any further uncontrolled expansion. The mechanism of control provided for a standard quota for each of the participants based upon the production in the base year 1929. Every three months the International Tin Committee, composed of representatives from the signatory governments, was to examine the ratio of production to consumption and issue suggestions to each government for quota revisions. The original quotas were set at seventy eight per cent of the 1929 production, but because the price did not rise and stocks did not fall as rapidly as planned the degree of restriction had to be increased. In August 1931 the special problem of surplus stocks was attacked by the formation of a private pool which purchased the excess stocks and cleared the market.[1] By July 1932 production was restricted to one third of the 1929 output. A gradual increase in American demand allowed for gradual increases. By 1937 when the agreement was renewed, quotas were set at 100% and were increased to 110% for the last nine months of the year. The pool was in operation at the outbreak of present hostilities. Because of war conditions information on operations up to the time of Japanese domination is not available.

There seems to be little doubt that the primary

---

1. This pool worked in close cooperation with the International Tin Committee and within a short time the stocks were liquidated. The primary purpose of the pool to reduce pressure of existing stocks on prices was accomplished.

purpose of the scheme, namely to raise the price in world market to a profitable level, was achieved. When the scheme was first started tin was selling at 122 pounds per ton. After a series of wide fluctuations the price rose until it reached 150 pounds in the last half of 1932. The stimulus of increased consumption in the United States and the rearmament boom forced the price to 300 pounds by March 1937. The business recession in the United States brought a drop to 175 pounds per ton in the early part of 1938 from which there was a gradual increase brought on by the impending outbreak of hostilities. It is thus evident that the control has achieved the desired goal of a price sufficient to allow profitable operations. Most producers agree that at a price of 200 pounds all can operate at a profit. A more important question which has been raised is whether or not the control has not gone beyond its goal of achieving profitable price and is not exacting an unreasonable tribute from the consumer.

Discussion of the control of tin is not complete without mention of the conflict between high cost and low cost producers. It is contended that the burden of restriction falls on the low cost group, for when the price is increased by restriction quotas the high cost producers are able to operate and additional supply is brought into the market which would not be available were the price lower. When quotas were fixed at high levels difficulty from this source was kept at a minimum due to the prevalent feeling among low cost

producers that they could take away the market from their competitors at any time if they so desired. When production control was necessary and restriction quotas were lowered the cries of complaint were heard, for it was then that the low cost producers felt that their production was limited more than necessary. Many threatened to secede from the control plan, but up until the time of outbreak of hostilities the situation was kept well in hand.

2. International Control of Rubber. Since the World War rubber has been subject to either voluntary or compulsory control. The industry is comparatively young. Its growth parallels that of the automobile industry which has been its chief user. Prior to 1900 most rubber came from the Amazon valley or from Central Africa where the trees grew wild and expeditions had to be organized to travel around and tap them.[1] Around 1900 commercial plantings were begun in Malaya and were extended to Java and Ceylon. Up until the outbreak of World War I the industry grew steadily with tremendous acreage planted and the price, though fluctuating sharply at times, fairly profitable. During the War the great trouble in the industry was with shipping. In 1917 rubber was selling in Singapore at half the price it was bringing in London simply because shipping facilities were not available.[2] Stocks were

---

1. Rowe, Op. Cit., p. 132.
2. Ibid.

piled up in Malaya and a voluntary restriction scheme had to be introduced. As shipping became available stocks were moved out and the plan was abandoned. However, in 1920 came the post-war business slump in the United States which was at that time using about two thirds of the world production. Voluntary restriction was again tried under the auspices of the Rubber Growers Association of London, but the opposition from some of the members of the association was so great that it became necessary for the British Government to intervene. Too much British capital had been invested and the industry had reached too high a level of economic importance to Malaya and Ceylon for the government to overlook the situation. The famous Stevenson Committee was appointed and made a survey of conditions the results of which were presented in its report of May 1922. In this report the Committee advised that no restriction scheme could be effective without the cooperation of the Dutch, but when the Dutch refused to enter the plan the Committee reconsidered and recommended the establishment of a scheme by the British alone.

The essence of the Stevenson Plan was control of exports from Malaya and Ceylon. A standard tonnage was determined for each grower based on the 1919-1920 production and quotas were set up on this standard. The initial restriction was sixty percent and as soon as the plan was released there was an immediate increase in price. For the first few years the plan operated successfully. At the end of 1924, however

there was a sudden increase in consumption in the United States which drove the price to over 4s by November 1925. The result of course, was large increase in the exports of those countries outside the scheme especially the Netherlands East Indies. In the United States public sentiment was aroused and successful attempts were made at conservation and the use of reclaimed rubber. By October, 1926, the effects of these developments were fully reflected in a long time low price of 1s. 9d. Further quota changes were made, but by that time it was apparent to the British government that they could not carry on the scheme alone as they did not control enough of the market to control the price without losing their proportionate share of world rubber business. The plan was abandoned on November 1, 1928.

The business depression of 1930 presented new problems common to both British and Dutch and an attempt was made by a group of British and Dutch producers to voluntarily restrict their outputs. This attempt failed and though the governments of the respective countries were hesitant to interfere and understanding was finally reached in April, 1934, for an international restriction scheme. This understanding included the English, French and Netherlands governments.

The new plan, like the Stevenson plan embodied a control over exports. However unlike the Stevenson plan it included the entire industry and controlled not only exports but planting and replanting. The mechanism for changing

quotas was also more flexible.[1] The basic tonnage on which quotas were based was determined by potential production rather than past production, and allowance was made for trees which were not yet productive. There was also provision for change in basic quotas if this became necessary. The entire quota system was very flexible and this proved later on to be an important asset to the plan. Control of the quota system was vested in the International Rubber Regulation Committee.

When the control started in 1934 there were monthly reductions from 100 percent of basic tonnage to 70 percent from June to December. During the next two years the percentages varied from sixty five to seventy five according to market conditions. A slump in consumption in the United States led to reductions to sixty and then to forty five percent by the end of 1938. By 1940 war conditions had caused increases to ninety percent and one hundred percent for the first three quarters of 1941 and one hundred twenty percent for the last quarter.[2] The plan was in operation up until the time of Japanese conquest of the rubber producing areas in the early part of 1942.

As measured by price, the control achieved a substantial success. Since the inception of the scheme there has

---

1. The Stevenson plan provided for quota changes once every three months and limited these changes to five or ten percent a month. There was not sufficient flexibility to correct quickly maladjustments between supply and demand.
2. Spiegel, Op. Cit., p. 264.

been a gradual increase in price. At times the price was high enough to stimulate the use of reclaimed rubber, but the flexibility in the quota system allowed changes to be made to overcome this. In 1936 the Committee was criticised for failure to adjust quotas at the proper time. There was reflected at this time a vital factor inherent in all such schemes, the human element. This factor has been the cause for the failure of many schemes of control. On the whole, however, the plan has worked out well. The Committee has exercised a liberal price policy and has been interested in stabilization of prices rather than in the exaction of high prices from the consumer. It has administered successfully a scheme of control by utilizing the lessons of previous attempts and overcoming their pitfalls.

3. The Chadbourne Sugar Plan. During World War I there was a severe shortage of sugar in all countries. Cuba was the only country where sugar production could be expanded to meet this deficiency thus there was an enormous amount of new planting of hitherto uncultivated land. Except for a short period of depression after the war Cuba enjoyed a period of prosperity which extended into the middle twenties. In the 1924-25 season the production of sugar jumped up tremendously and though consumption was increasing it could not keep pace with the sudden increase in production. About this time Cuba introduced her first restriction scheme which included a severe production control program. As Cuba reduced her pro-

duction her competitors, benefiting by a price which would have been lower had the Cuban production not been restricted expanded their production so that the only result was a substantial decline in Cuba's share in the world market. Disgust with the results of the scheme resulted in abandonment at the end of 1928. Good crops in the 1929 season forced the price down and the decreased importation by the United States after the stock market crash brought increased supplies of sugar on the world market. The desire for control was manifest at this time. Cuba, with its recent unsatisfactory experience, was not willing to repeat its mistakes and hence sought the cooperation of other exporting countries. Under the stimulus of decreased consumption and increasing stocks an agreement was reached in May 1931. William L. Chadbourne, an American, was instrumental in bringing about the agreement, hence the plan bears his name.

The participants included Cuba, Java, Germany, Poland, Hungary, Belgium, Czechoslovakia, Peru, and Jugoslavia. The purpose of the agreement was twofold; to raise the price to a profitable level and to distribute without repercussion the excess inventories. The method of control consisted of a system of export quotas supplemented by control of production. Problems of production made it necessary for each country to adopt its own method of control. Cuba established quotas within the country and in addition levied a heavy tax on the output of new mills constructed during the life of the scheme.

Java used a system of export licenses with heavy fines for evasion. Similar action was taken by the other participants. The sharp decline in production of the participating countries indicates that production control was effective.

The plan was under the jurisdiction of the International Sugar Council with large voting power in the hands of Cuba and Java who were the leading producers. Provision was made for automatic increase in export quotas if the price advanced beyond certain levels. The provision, however, provided only for automatic increases upward and when downward revision was required it was necessary to secure the approval of every participating member. This made the adjustment of supply inflexible and the bickering and discussion resulted in tardy adjustments of quotas which occasioned disputes between Cuba and Java.

Unfortunately the scheme did not work out as intended. When the scheme was instituted the participating countries represented about ninety percent of world production and with so large a proportion of the world market under their control they felt relatively safe in adopting the scheme. However, other factors intervened which tended to upset their plans. The chief cause was the desire of the consuming countries to achieve national self sufficiency particularly with respect to sugar. Tariff walls were erected and bounties paid to encourage home production and reduce dependence on outside

sources.[1] Thus despite a successful restriction program prices drifted lower and lower. After four years of restriction the chief results that could be reported were a sharp decline in production and a diminished control of world markets. The sharper proportionate decrease in the output of Java by comparison to the outputs of other participants made the producers of that country dissatisfied with the plan and unwilling to participate in the renewal. With lower prices and heavier inventories neither of the objectives was achieved and the plan was discontinued at the expiration of the agreement in September 1935.

Controls by government agreement have represented a depression phenomona. Decrease in consumption, excess production, and low prices, the results of the dislocations arising from World War I, have resulted in the desire to control markets by joint cooperation. The attempts at control have been fostered by political and economic conditions, particularly by the desire of many important countries to become self sufficient. This desire has led to tariffs and subsidies to encourage domestic production. The ensuing frictions glutted the channels of world trade causing contraction for exporting countries, and general breakdown. Restriction was the only apparent solution.

---

1. In England Consumers paid three times as much for home sugar as they could have bought it for on the world market. Rowe, MARKETS AND MEN, Chap. IV.

The schemes discussed have used relatively uniform methods. They indicate that control of supply within each country can be reasonably achieved and that effective control over supply in world markets is possible. Control over price on the other hand has not been similarly effective. Despite restriction controls there has been wide fluctuation of prices due for the most part from inability to forecast correctly what the consumption will be. This inability has led to failure to restrict supply sufficiently or to delay in regulating quotas when consumption is changing rapidly. It constitutes the human factor which is so important in agreements of this type.

One of the most costly lessons that has been learned from these agreements is that control over the entire supply is prerequisite if a good part of the market is not to be lost to competing producers. Control of supply must include all producing countries whether or not they export and if necessary liberal allowances must be made to the smaller countries as an inducement for their cooperation. When complete control is not accomplished the inducement to those producers outside the control to increase their production and take advantage of a higher than normal price is great and too often results in breakdown of the control scheme.

Most intergovernmental agreements are formulated to help the producer and have little consideration for the consumer. Some agreements have contained provision for consumer

representation but these representatives may act only in an advisory capacity. However, the problem of consumer exploitation is very important. The high price maintained by the tin and rubber schemes indicate that it is not to be overlooked. Backman suggests that "consumers should be allowed to help determine policy and should be permitted to vote on subsequent changes. They should insist upon a price determined by approximate costs of production including a fair profit and then make certain that the control authorities do not force prices substantially above that level."[1] The suggestion is very pertinent. Exploitation can be harmful not only to the consumer but to the producer. In the long run any action which prevents unreasonable prices should be welcome by restricting countries.

---

1. Backman, GOVERNMENT PRICE FIXING, p. 152.

CHAPTER IV

PRICE FIXING IN THE UNITED STATES

No other nation is as fervent an adherent to the ideals of free markets, free prices, and free enterprise as is the United States. Yet several times in our recent history conditions have come about which have necessitated the temporary shelving of these ideals. We have lived through two world wars and an intervening depression and have had to resort to artificial devices to help along our economic system. Through all this we are still strong adherents of the free economy, but it is now becoming apparent that our ideals are going through a period of change. Our concept of a free economy in which control of any sort is taboo is developing to the point where we recognize that certain man-made devices are necessary to help our economy along and that a relatively free economy which allows freedom of enterprise and individual initiative can only be maintained through the aid of artificial controls. We have seen the advantages of regulatory bodies governing utilities; we have recognized the invaluable advantage of our Federal Reserve System. These are man-made devices of control which are operating within our system of free economy. We could not do without them. It is gradually becoming obvious then, that there are other man-made forms of control of great value which can be adopted--which will not

stifle our economy. The United States is traditionally an idealistic nation, but like anything ideals cannot stand still. Our ideals are today emerging from a transitional period. We are reaching the point where we recognize the need of control and we are searching our own experience and the lessons of others so that we may apply these controls wisely.

World War I interrupted for the first time our free methods of business. Between 1914 and 1918 price control, price fixing, and other commodity controls, which had spread over all continents, was adopted in the United States in relatively mild form. Our ideals of free economy were little effected by these controls because they were very mild and considered as temporary expedients until such time as our free system would be reestablished. After the war, with little delay, all regulations were withdrawn--unfortunately, almost immediately after the armistice.

Price Fixing During World War I

In World War I we had no central price fixing agency similar to our O. P. A. The war effort was not an all out one and we could produce the necessary munitions with little curtailment of domestic production. There was no real need for central control. Instead the power to fix prices was divided among a number of agencies which included the Food Administration, the Fuel Administration, the War Industries Board, the Price Fixing Committee, the War Trade Board and the War and

Navy departments. Although there was no central agency there was a central program, the goal of which was to hold prices down, and a fair degree of coordination in this policy was attained through the use of interlocking representatives on the different committees. The method used has often been referred to as "selective price fixing."

Numerous methods both direct and indirect were used to control prices, but of these two stood out prominently to characterize our controls, the fixing of maximum prices and the fixing of maximum margins of profit. Prices were theoretically free to fluctuate but the tremendous pressure pushing prices upward brought about a situation where the maximum price for all practical purposes was also the minimum price. Margins of profit were fixed to limit excess profiteering. This was usually done on a cost plus basis and carried through the various levels to the ultimate consumer. To carry out these techniques patriotic appeals were made to business men and there was always the threat that the government might take over industry or requisition any material needed. The element of fear that the government might make good its threat exerted enormous influence and secured the necessary cooperation which assured a relatively successful compliance.

The most important legislation of price control during the war was the Lever Act for food and fuel. The purpose as stated in the act was:

"to assure an adequate supply and equitable distribution, and to facilitate the movement of foods, feeds, fuel, including fuel oil and natural gas, and fertilizer and fertilizer ingredients, tools, utensils, implements, machinery, and equipment required for the actual production of foods, feeds, and fuel hereafter called necessaries; to prevent locally or generally, scarcity, monopolization, hording, injurious speculation, manipulations, and private controls affecting such supply, distribution, and movement; and to establish and maintain government control of such necessaries during the war."[1]

The act contained a provision guaranteeing a minimum price of $2.00 per bushel for wheat of the 1917 crop, the only instance of direct fixing by law during the war. All other measures of control under the Act were to be exercised by the right of the president to require any industry which he thought necessary to the war effort to come under a license system. The Act also contained authorization for the powerful Federal Fuel Administration.

United States Food Administration: Shortly after the passage of the Act the United States Food Administration was set up with Herbert Hoover as its head. The Administration was responsible for practically all foods including canned foods. As basis for the enforcement of its work it utilized the license system and engaged in a program of publicity to secure voluntary cooperation. Under the license system, conditions of operations for food dealers were set up; books had to be opened for inspection when requested; reports at

---

1. Lever Food and Fuel Control Act, Approved August 10, 1917.

frequent intervals were required; transactions with violators of the law were prohibited; and profits were restricted to a "reasonable" limit. An elaborate administrative organization was organized including an Enforcement Division which was very active. This division granted hearings, suspended licenses, issued stop orders, and handled all matters relevant to the enforcement of the Act. From August 10, 1917 to December 30, 1918, the division revoked 676 licenses in addition to other cases handled in conjunction with state administrators.[1] An unexpected asset in securing compliance was contained in the gigantic propaganda campaign which utilized all means of social pressure through the schools, women's clubs, churches, and other organizations. This campaign was first concerned with the problem of conservation, but it also served to familiarize everybody with the rules and regulations of the Food Administration and it proved a great help in the detection of non compliers.

The above discussion includes only the broader aspects of the operation of the Food Administration. There were of course numerous other techniques supplemented with special rulings which were necessary to coordination of the complete price control program. For example in order to simplify control over bread prices it became necessary to

---

1. Garrett, Paul W., GOVERNMENT CONTROL OF PRICES, War Industries Board Price Bulletin #3, Government Printing Office 1920, p. 145.

to standardize the size of a loaf of bread. A special board had to be established to purchase Cuban sugar and sell it to American refiners so as to equalize the cost differentials between the two countries. A system of rationing and zoning had to be worked out to secure adequate distribution of sugar according to population and needs. The scope of the program was so inclusive in the food field that every available technique was needed.

United States Fuel Administration: Under the power given him under the Lever Act the President created the U.S. Fuel Administration which assumed complete control over fuel and allied industries. Its operations were more restricted than those of other agencies because the others dealt with so many more commodities. The Administration was similar to that of the Food administration with officials located in the important cities throughout the country. The techniques and weapons of enforcement were also similar to those of the Food Administration. Authority under the Fuel Administration was entrusted to Harry A. Garfield, President of Williams College.

The most important problems confronting the Administration were how to secure adequate transportation facilities, how to stimulate production to meet the demand, and how to control prices in order to prevent a runaway market and excess profiteering. By the establishment of a zoning system within which producers had to confine their sales a great deal of unnecessary cross hauling was eliminated releasing large

amounts of car space needed for delivery. The fixing of prices was undertaken at every stage from mining to distribution. Prices were fixed at first on rough estimates of cost and later under the bulk line method.[1] Margins were set for miners, jobbers, and retailers and the attempt was made to fix them low enough to prevent excess profits, yet not so low as to remove the incentive to increase production. On the demand side conservation measures which included lightless nights and heatless days and reductions in non-war industries were made. In this manner complete control over a vital industry was instituted and from the record of its operations it appears that the control was highly satisfactory.

War Industries Board and Price Fixing Committee: One of the most powerful agencies of the World War period was the War Industries Board which grew out of the Council for National Defence. It was first organized as a part of the Council in July 1917, but was made an independent agency in May 1918, with Mr. Bernard Baruch as its chairman. Its jurisdiction included mainly basic raw materials, but practically all commodities with the exception of food and fuels came within its scope. The major task of the Board was to determine government requirements for munitions and to allocate orders among the industries that could supply them. In line with

---

1. See discussion below. Page 52.

this, priorities had to be determined for these orders and it became necessary for the board to decide the relative importance of commodities and services to the war effort. Numerous decisions of this type were made. The Board also entered into many agreements fixing maximum prices. These were usually arrived at by voluntary offer of the producers or by compromise between producers offer and government demands reached in conference.[1] This method was later implemented by the cost plus based on scientific principles.

On March 4, 1918 President Wilson created the Price Fixing Committee to take over the price problems of basic materials formerly handled by the War Industries Board. The new committee had independent status, but it worked in close cooperation with the Board. Besides the chairman of the War Industries Board the committee was composed of one representative each from the departments of Agriculture, War, Navy, the Tariff Commission and the Federal Trade Commission.[2] Shortly after the establishment of the new committee the jurisdiction of each was sharply defined. Certain industries such as iron, steel, cement, and lumber which were formerly under the control of the War Industries Board were transfered to the Price Fixing Committee. In addition the Committee initiated con-

---

1. Stein Herbert, GOVERNMENT PRICE POLICY IN U.S. DURING WORLD WAR, Williams College, Williamstown, Mass., 1939, p. 97.
2. The representative from the Tariff Commission was the noted economist Dr. F. W. Taussig whose article in the Quarterly Journal of Economics 1919 is one of the best on the subject.

trols of hides, textiles, brick, sand, and gravel and other complementary products. The War Industries Board exercised controls, independent of the Price Fixing Committee, of lead, wood chemicals, nitrates, quicksilver, nickel, manganese, etc. The general procedure of control was to secure information on costs and then to call in the industries in question, get their viewpoints and then determine a mutually satisfactory price. After the price was agreed upon it was recommended to the President with whose approval it was put into effect. Little difficulty was encountered in obtaining the cooperation of industry, for in the event that an industry refused to cooperate the leaders were informed that the alternative would be comandeering of output by the government. This threat was the major means which the Board and the Committee had to secure compliance.

Price controls during the war were exercised also by the War Trade Board which supervised exports and imports, the War and Navy Departments, the Federal Trade Commission, The Department of Agriculture, the Railway Administration and other government agencies. However, the most significant work was done by the four agencies mentioned.

During the early period of control prices were usually determined by the methods described above. They were commonly known as the higgling process inasmuch as there was no really scientific basis for their determination. However, after price control had become more firmly established,

it was desired to replace this method with something more accurate. It was here that difficulties arose, for it became necessary to have some standard by which to judge prices as reasonable or unreasonable. The chief difficulty which faced the government was a conflict in its own purposes; on the one hand to reduce prices, and on the other to maintain maximum production. The almost universal answer was that prices should be based on costs plus a reasonable profit but there was wide disagreement as to which costs should be taken. In almost every industry there was a wide spread between the average costs of the most efficient producer and the costs of the least efficient. With only one producer the problem would be relatively simple, but with many producers complexities arose. A high price would afford high profits to the low cost producer and a low price would bring complaints from the high cost producer. On one point there was complete unanimity. The price fixing agencies were agreed that a single price was desirable within an industry. They felt that an attempt to discover the actual cost for each producer would be a slow and costly process and that fixing prices on a cost plus profit basis for each producer would eliminate much of the incentive to efficiency at a time when the nation was striving to conserve its resources to the utmost.[1] A sort of compromise method was adopted. It included in all cases where

---

1. Stein, Op. Cit., pp. 98-99.

costs were determinable a single price based on cost plus reasonable margin of profit, and was commonly known as the "bulk line method" of fixing prices.[2] The term bulk line refers to the unit cost of the marginal producer whose output was considered essential. In order to stimulate production the price was fixed high enough to ensure profitable operations for the bulk line producer. According to Taussig "the marginal or price determining producer was found at a point where from 80-90 percent of the output was included".[2] Bulk lines were usually fixed somewhere between these points. This did not prove a hardship to many producers and though the low cost producers were enabled to reap large profits it was felt that these would be drained off in the form of taxes on excess profits.

Inasmuch as the attempts at price fixing during World War I were concentrated into a very short period of time, it is difficult to evaluate them. Studies made, however, indicate that though the index for uncontrolled commodities rose steadily throughout the war period, the controlled group declined sharply starting in 1917 when control became effective and then remained comparatively stable until the end of the war. In certain industries such as building materials there was constant increase throughout the period but the controlled

---

1. In a few cases where cost data was not adequate the price was determined by averaging market prices over a set period in the past.

prices leveled off and achieved a degree of stability within a short time after control became operative. It seems fairly certain then that war time control of prices was successful in accomplishing its major objective of preventing runaway prices. The result and significance of war-time price fixing is summarized by Professor Taussig as follows:

> "So far as the experiment went, and so long as it lasted, the outcome seems to me to have been good....Food and Fuel prices were prevented from fluctuating as widely and soaring as high as they would have done in the absence of regulation. A result of the same kind and apparently not in less extent was secured for other price regulated articles."[1]

Many who have studied out attempts of control agree with Professor Taussig that it had many favorable effects. Price rises were checked and profiteering was reduced without having any appreciable effect on production. It is not to be assumed, however, that a most economic utilization of resources took place. As a nation we were still green at this type of control and the period under consideration was not of sufficient duration for us to gain adequate experience.

Price Fixing Under the N. R. A.

With much difficulty and in a very haphazard manner the country went about the business of readjusting itself after World War I. Indeed the ideal of free economy was so dominant that it would be more accurate to say that readjustment, if

---

1. Taussig, Op. Cit., p. 240.

one can call it that, came about by itself. All control was removed almost immediately after the war and there was very little, if any, government aid in effecting a smooth readjustment. Under this policy the country progressed through the boom period which culminated in the stock market crash of October, 1929. It was at first thought that the depression which followed would be short lived, but as time went on and the effects became more severe, it became apparent that government aid would be necessary. That a gradual change was occuring in the philosophy of American government was indicated in the election of 1932. The democratic party under the leadership of Franklin Roosevelt was swept into office. It was elected under the promise that it would immediately invoke measures to relieve the suffering and hardship brought on by the depression. It was elected because it recognized that there had been a change in the American ideal of business without government control and it had incorporated this change in its platform. Immediately upon taking office President Roosevelt set about the task of carrying out these measures.

The group of measures carried out by the democratic administration in the preceding years was collectively known as the "New Deal". The National Industrial Recovery Act was one of the most important of these measures. The purpose of the Act was to promote the recovery of business activity by spreading employment and increasing industrial payrolls. This was to be attained by shortening hours of labor and increasing

rates of pay. The Act also intended to secure reforms in business practices in order that competition might be preserved from self destruction and that business activity might be made less liable to disturbance. Under provision of this Act the National Recovery Administration better known as the N. R. A. was organized to carry out these measures. The underlying theory was that by increasing the purchasing power of labor through spreading of work and increasing rates of pay, a stimulus would be given to the stalled wheels of industry. This stimulus was necessary to overcome the inertia of the business cycle and set it once more on its way to recovery. The N.R.A. was therefore concerned with labor conditions and business practices. Actually the scope of its activities was so comprehensive and the devices advocated so many that it is impossible in this discussion to do justice to every phase. Our purpose will be achieved if we merely touch on the highlights of the control.

There is nothing in the NIRA which specifically authorizes price fixing either government or private. However, examination of the debate on the Act of Congress reveals that some degree of price fixing was intended. This is indicated in the failure to accept the Borah Amendment specifically prohibiting price fixing. Instead the amendment was changed to prohibit codes fostering monopolies or monopolistic practices. It is evident that though no direct provision was made both business leaders and legislators were aware of

the possibilities under the act. Actually what occurred was price fixing by business groups rather than by the government itself. It might more accurately be referred to as private price fixing with government sanction. It should also be pointed out that it was not the purpose of the N.R.A. to directly control price fixing, but that the pressure of events made its use unavoidable. This situation is explained by Donald Richberg:

> "It was, of course, no part of the original purpose of the N.R.A. to have anything to do with price-fixing, except to prohibit any monopolistic price fixing agreements. Yet step by step through the diabolical logic of events the N.R.A. became the apparent exponent and protector of "price-fixing" -- the hateful objective of that most hated ogre, a big business monopoly. Like the story of a young man's downfall, "One thing simply led to another."[1]

With the pressure of events price fixing became unavoidable. If business intended to increase wages and shorten hours some concession had to be made to ensure that those who raised their prices to cover the increased costs would not be undersold by competitors. A floor on prices had to be set and indeed in the code making, business saw to it that this concession was secured. This was not the only concession which business tried to get. The making of codes was characterized by a sort of horse trading in which business tried to get as much as possible in return for its concession to lower hours and increase wages.

---

1. Richberg, Donald, THE RAINBOW, Doubleday, Doran & Co., Inc. 1936, p. 31.

Code making was carried out under supervision of the N.R.A. Most proposed codes were drawn up by trade associations or similar organizations and hearings were held to determine whether the proposals were sufficiently representative of the opinion of the industry, whether labor and consumer provisions were properly inserted, and whether the provisions with respect to fair trade practices were properly non-discriminatory. Industrial, labor and consumer boards were formed to give assistance, but the dominant members of an industry were naturally in a preferred position and were able to protect their particular interests in the codes finally approved. The process of code making was necessarily a cumbersome one and there were numerous delays. That the effect of the Act might not be lost the President invited industry to voluntarily sign the President's Reemployment Agreement, more popularly known as the blanket code. The signers of this agreement were bound to put into effect certain measures regarding maximum hours, maximum wages, child labor, etc. until codes for their industry could be formulated. The taking of signatures was handled by the Post Office Department and there was general voluntary cooperation stimulated by patriotic motive and the desire to show the sign of the Blue Eagle, the symbol of the gentlemen's agreement with the President.[1]

---

1. The Blue Eagle was later superseded by the Code Eagle, a symbol of compliance with the law.

Enforcement was handled by the National Compliance Board in Washington. Branch boards were formed in every community, and it was their duty to sift alleged code violations, mediate disputes and interpret the codes. Ten regional directors were appointed who were to act as intermediaries between local, state and national boards. In most cases the United States district courts were open to original action in cases of alleged violation. In the case of labor violations, however, the National Labor Board later replaced with the National Labor Relations Board, was usually the first court of review.

Price fixing devices adopted under the N.R.A. may be divided into two classes, those which tended to fix minimum prices and those indirect controls which attempted to limit available supply. Among the devices which attempted to establish minimum prices were prohibition of sales below cost, loss limitation provisions, emergency price fixing, and provisions directly fixing prices either according to a specific formula or at an arbitrary level determined by the Code Authority. Indirect controls on supply included restrictions on new capital capacity, production quotas, and limitation of hours for labor and machinery. Other devices which fall outside the limit of these classifications were used. These include regulations of credit, discount, premiums, advertising and trade-in allowances, and were used not so much for the effect they would have on the level of prices, but rather so that those who found price fixing not to their liking might not

engage in practices which would circumvent fixed minimum prices.

Open price systems were widely adopted under the N.R.A. An open price system has been defined as a means by which "some or all of the individual members of an industry make available to one another information concerning prices at which their products have been sold, are being offered, or are to be offered."[1] The major purpose of these systems was to make price data available and they were used to supplement other methods rather than as a direct method in itself. However they did enjoy wide use and were included in more than 400 codes.[2]

Theoretically minimum prices could be fixed under most codes but the number of such provisions which actually became effective was very small. Legally there were only 93 codes in which a minimum price was in effect. The rest of the codes required sanction for supplementary rules which were never submitted by Code Authorities.[3] Whatever minimum price fixing was achieved was done through grants of power to Code Authority (arbitrary), emergency price fixing, or prohibition of sales below cost. Grants of power to arbitrarily fix prices were used infrequently, but the large number of complaints which arose in connection with this device publicised

---

1. Abramson and Lyon, THE ECONOMICS OF OPEN PRICE SYSTEMS, Brookings Institute, p. 3.
2. Ibid., p. 23.
3. "The National Recovery Administration," House Document #158, 75th Congress, 1st session, 1937, pg. 132.

it all out of proportion to its importance.[1] This publicity reached a high peak in April 1934 when a New Jersey tailor was jailed for pressing a suit for five cents below the code price. This event led to much adverse criticism and no doubt influenced the President to sign an executive order suspending price fixing in codes of local service industries a very short time later. The Code Authorities found that they had an almost impossible task on their hands. There were some hundreds of thousands of separate and distinct prices which had to be fixed many of which had to be carefully considered because they were subject to special discounts or differentials. Though the attempt was to fix minimum prices in most cases these minimum prices were much too high. It turned out impossible to figure prices which would preserve a harmonious arrangement in all stages of production to the ultimate consumer. Under these circumstances complaints came from both producers and consumers and they served to make non-compliers more numerous.

Emergency price fixing became important in February, 1934, when the N.R.A. prepared a new clause covering special emergency situations. At first a state of emergency was declared by the Code Authorities with the approval of the Administrator, but under later policy the Administrator deter-

---

1. The grants were made in the cleaning and dyeing and lumber and timber codes.

mined the existence of the emergency. Emergency price clauses were included in a great number of codes, but minimum prices under these provisions were carried out in very few. Many industries applied for price fixing under emergency clauses, but the requests were not granted by the administrator, because it was found that there was divergent opinion as to what constituted an emergency. The administrator considered it an expedient for meeting a temporary situation, such as a price war, but industry attempted to invoke these provisions to combat a permanent situation. On the whole little was accomplished by the use of emergency price fixing provisions to establish minimum prices, but the N.R.A. did prevent widespread misuse of the provision.

Prohibitions against sales below cost is another device found in most codes. Under such provisions it became unfair to sell below cost except under certain conditions.[1] The argument in favor of such provisions was that they would prevent price cutting with the resulting bad effect on business, particularly small business, for price cutting was viewed as essentially a monopolistic practice. The term itself "sales below cost" implies that it had to be determined whose cost would be used and even more important what constituted cost. The terminology used in the various codes

---

1. The most usual conditions were to meet competition of lower cost producers and to dispose of distress goods.

is anything but uniform. The manufacturing codes prohibited sales below cost of the individual producer. Other codes referred to "lowest representative cost" or "lowest reasonable cost", all vague concepts with ambiguous meaning. On the determination of what constituted cost there was even less uniformity.[1] Under some codes a trade body was allowed to average the overhead costs in the industry and this average was used by each member instead of his own costs. Cost of raw materials were figured at current market value regardless of prices at which they were actually bought. No real concept of what constituted price was ever developed under the codes. Instead there were numerous rules of pricing differing in each code and often contradicting each other. Even where cost systems for certain industries were worked out they had little effect on prices because no serious effort was made to invoke and enforce the provisions.

Controls on the supply side were carried out in about much the same manner. There were provisions in some codes limiting the use of plant and machinery. The idea behind this was similar to that of reducing hours for labor. Unemployment would be alleviated by limiting working hours and spreading available work. In the matter of practical application, however, it became difficult to spread fairly,

---

1. See Terborgh George, Price Control Devices in N.R.A. Codes, Brookings Institute, for discussion of this point. Ch. 3.

available work without sacrificing the more efficient producing plants for the less efficient with the result that the consumer paid a higher price than he should have. However, aside from this, the limitations that were carried actually did succeed in limiting the number of units produced. This was done by plant limitation and also by use of production quotas the latter applying to a whole industry rather than to particular plants.

After but a short period of operation, it was evident that the codes had been set up too hurriedly and on too wide a scale to avoid unwise or unworkable provisions. In March 1934 the National Recovery Board was established, the purpose of which was to examine the whole N.R.A. set up. In the following months the Board submitted reports known as the Darrow Reports which indicated that the codes of a number of leading industries were controlled by representatives of the larger firms, favoring conditions of monopoly and seriously injuring small business. These reports were strongly criticized by NRA officials, but partly in response to the attention focused on these reports and to the growing recognition of unenforceable provisions alteration in NRA policy were immediately announced.

From the earliest days of the N.R.A. there was grave doubt as to the constitutionality of the legislation upon which it was established. The inherent unconstitutionality was denounced by laymen as well as trained lawyers.

The drift of the government in the later period towards a narrow application of the codes seems to indicate that authorities appreciated the probable unconstitutionality of the system. The chief hope of the government was that by the declaration of an emergency the legislation might be considered constitutional. However the government was obviously reluctant to submit the legislation to the final test when the test finally came their reluctancy was justified. Under the Shechter Poultry Case the Supreme Court decided that the legislation was an unconstitutional delegation of powers by the president and that the federal government did not have the right to regulate hours and wages in intrastate commerce merely because of the effect on interstate commerce. It is significant that the Court has reversed itself on every one of these points since then.

It is difficult to accurately appraise the success or failure of price fixing under the N.R.A. Adequate information concerning the operation of the codes is not available and the period of operation was really not long enough. There were, however, some cases of apparent success. Emergency declarations in the cast iron soil pipe and agricultural insecticide and fungicide industries worked out very well, but were given little consideration.[1] From the beginning, however, there was serious doubt entertained about the constitutionality

---

1. Backman, Op. Cit., p. 69.

and this operated as a deterrent to effective compliance. As the program continued there was a gradual break down of price control and a narrowing of the scope of the program. The decision in the Schechter case brought the program quickly to a close.

CHAPTER V

DIRECT PRICE FIXING

In the course of exchange of goods to satisfy human needs it can be truly said that in the long run goods and services exchange for goods and services. One good can be expressed in terms of another good and the ratio between the two will be determined by the conditions of supply and demand for the two goods. Actually the expression of goods in terms of other goods is a complex and unnecessary procedure. Human ingenuity has introduced money as a medium of exchange and these ratios are expressed in terms of a common unit. Price is the expression of this ratio in terms of the common unit of exchange, but as such it is still determined by the conditions of supply and demand for the particular goods exchanged. Prices then are really symptoms reflecting the conditions of supply and demand of goods bought and sold. When prices get out of hand, it must be taken as an indication that something has gone wrong with supply or demand or both. If the government attempts to alleviate a price situation, it must be concerned with three things, the common unit of exchange, the supply and the demand for goods. The common unit of exchange is usually stabilized over a period of time so that actually the government is concerned with conditions of supply and demand.

Direct price fixing refers to attempts to arbitrarily limit the movement of prices. We have seen that previous attempts to limit the movement of prices have been made without controlling supply or demand or with control of one and not the other. The fixing of prices at a level other than would prevail in a competitive market may drastically affect either supply or demand or both. Under competitive conditions changes in supply or demand change the price. Under arbitrary price fixing the order is reversed; changes in supply and demand are the result of the fixed price not the cause of it. Examination of basic economic principle will reveal this fact.

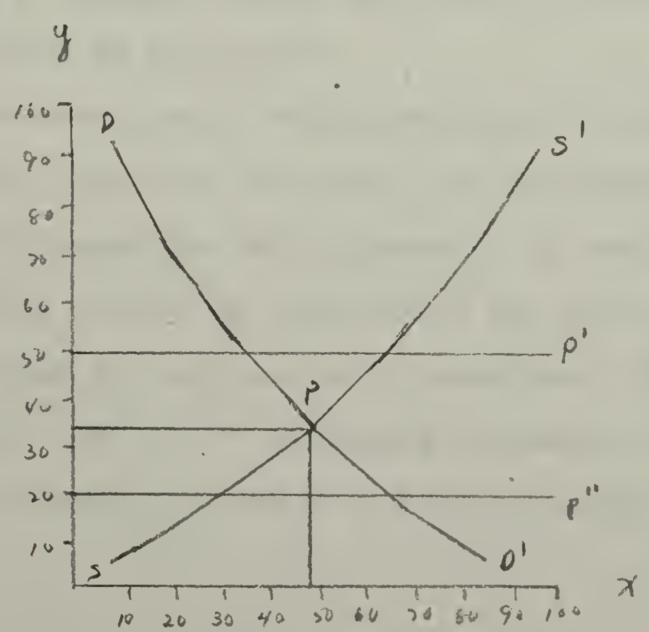


fig 1.

In figure 1 we have a graph of competitive conditions of supply and demand. The supply and demand curves cross at P which represents the price. Now if the government arbitrarily says that the price will be P' then the demand and supply

curves will readjust themselves somewhere along the line of P'.[1] The same applies if the government says that the price shall be P". Whether the price be higher or lower than would otherwise prevail, supply and demand must be affected by an arbitrary change of price. A situation where a government for no good reason merely sets a price is very unusual. Usually there has been a change in either supply or demand, and the government sets either a maximum or minimum price. Where a maximum price is set there are forces pushing the price upward, and where a minimum price is set there are forces pushing the price downward. Under these conditions either supply or demand has already been affected and the symptom reflected in the price.

Government price fixing attempts to either secure a profitable price for the producer, or to attain an equitable distribution of goods for the consumer. In either event government price fixing in itself will be of no avail unless it is accompanied by supplementary measures. In view of past experience this fact is to be doubly stressed. Graphic explanation will bring it home even more strongly.

---

1. Probably to the left of P because less goods will be demanded at the higher price and more goods will be offered. Conversly P" will fall to the right of P.

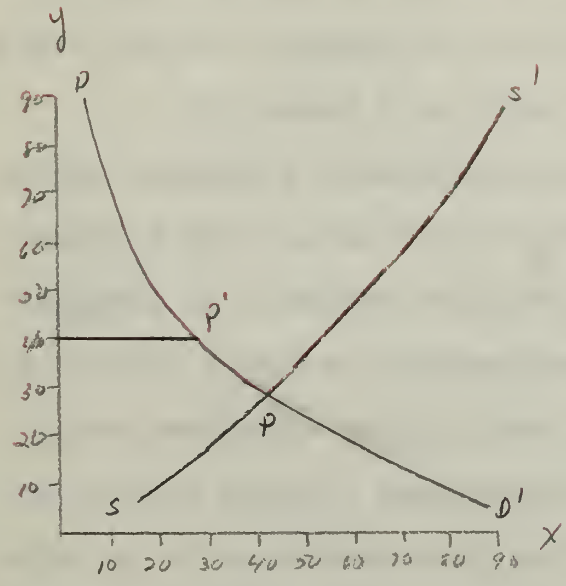


fig 2

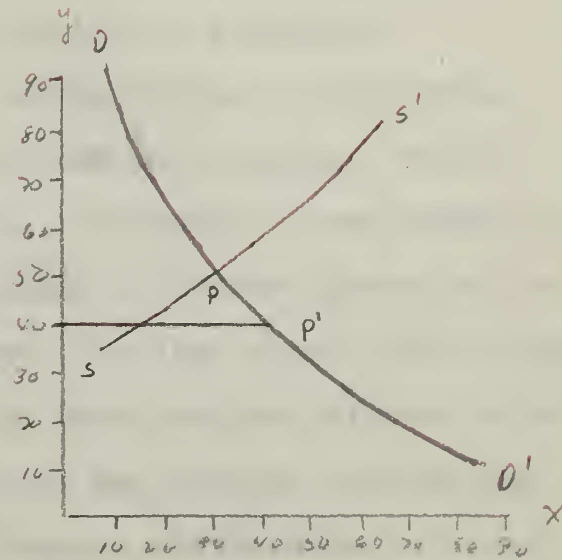


fig 3.

In figure 2 we have the situation of increasing supply necessitating the setting of minimum prices. The supply has here increased so that the price P does not bring to the producer sufficient return to cover his costs of production. Merely setting the price at P' will not help the situation unless steps are taken to reduce the supply so that it will adjust itself somewhere about P'.[1] This is usually done by means of production or export quotas as in the case of valorizations or by means of subsidies or other grants to the producer in return for lowering his production. The entire market must be taken into consideration for if any producer is left out, he will increase his production to take advantage

---

1. In figure 2 we assume P' to be the marginal cost of production although in many cases P' has been set far above the marginal cost of production.

[illegible]

[illegible]

of a market price which is higher than would be under purely competitive conditions, and he will do so at the expense of those who are engaged in the restriction programs.

In figure 3 we have the condition of decreasing supply requiring establishment of maximum prices. Such a situation may be, as at present, the result of war where the resources of a nation are mobilized to produce goods not intended for civilian consumption. Civilian goods become scarce and the available supply goes to those who can afford to pay the highest price. The government can help by setting the price at P' but there will be unequal distribution of the scarce goods unless a program of rationing is instituted. Also setting the price at P' arbitrarily will not help matters unless costs are held down so the producer can afford to sell his product at P'. This involves an integrated program of ceiling prices and rationing with everything which goes into the manufacture of the finished product held down. Such a program must also be accompanied by a highly regressive tax system and some system to force savings. Rationing and price fixing will help keep price and costs down and distribute goods fairly, but they will be defeated unless supplementary measures are not imposed to remove the excess purchasing power. If one device is tried without the other, or if in establishing ceilings, one of the factors of production is left to fluctuate without restriction, there will be a gradual increase of P' which may end in uncontrolled inflation. It is

obvious then that arbitrary price fixing in itself is of little value. It must be accompanied by supplementary measures. In examining past price fixing experiments it is amazing to note how often these facts have been diregarded.

Four methods of direct price fixing have been noted in Chapter I. They are:

1. A maximum price
2. A minimum price
3. A fixed range of prices
4. A fixed price relationship.

1. Maximum prices. Maximum prices refer to the setting of prices above which no transaction may take place. A ceiling is placed beyond which prices cannot move, but there is nothing to prevent prices from moving lower in accordance with conditions of supply and demand. This type of price fixing is uaually the antidote for an emergency of buyers and is intended to bring relief to the consumer.

In fixing prices there are three possibilities within which prices may be set. They may be set higher than the level which would preval under free competitive conditions; they may be set lower than this level or exactly equal to it. The latter situation is purely hypothetical for it is hard to imagine a condition where it would be necessary to set prices at levels exactly equal to the prevailing level, unless immediate change was anticipated in which case the situation would be analagous to either of the other two. If maximum prices are set at

levels higher than would prevail in the competitive market, little maladjustment will develop since in all likelihood prices will be maintained at the lower level. Anybody insisting at selling at the maximum price will simply lose business to his competitors who would sell at the lower prices. The important case then is the one where maximum prices are fixed at levels lower than tend to prevail in the competitive market.

In this situation there are usually forces at work pushing prices upward. The fact that prices are being fixed is in itself indicative that they would be higher if free conditions were left to prevail. It is important to note that thorough understanding of all conditions prevailing must be had before fixing is attempted. Practical experiences teach that there is a definite interdependence of prices which must be observed if the purpose of price fixing is to be achieved. This was brought home in the First World War by a sequence of events which took place in Germany. Maximum prices were placed on fats, but not all fats were taken into consideration, and the ceilings were placed on different fats at different levels. In the shuffle the price fixing agency had forgotten to fix the price for lubricating grease and the price of grease rose several times higher than that of butter with the result that the farmer found it much cheaper to use butter for lubricating his machinery than ordinary lubricating oils.[1]

---

1. Hirsch, Op. Cit. p. 78.

All related conditions must be taken into consideration, and it should be borne in mind that maximum prices fixed for one commodity almost inevitably lead to maximum prices for other commodities as well. Also maximum price fixing is not always the most advisable method for correcting maladjustments. Maladjustments, usually mean that for some reason or other supply and demand are not in their usual adjustment. By fixing the price lower than would otherwise prevail the tendency is to discourage increase in supply and encourage increase in demand. This usually occurs at a time when exactly the opposite trends are desirable.

Another factor of considerable importance is the development of forms of evasion when the maximum price is fixed at a low level. This is particularly true under conditions of scarcity. Maximum prices are set at a low level and in the course of time scarcity becomes very great increasing to a high level the price which would ordinarily prevail. The spread between the legal price and the actual price becomes very great encouraging black markets and other forms of evasion.[1] These forms include weight and measure manipulation, incidental fees, tie-in sales, cash transactions, side deal cash transactions, and other variant forms.

2. Minimum prices. Minimum price fixing refers to

---

1. Black market prices when they can be determined reflect to some extent the price which would exist under normal competitive conditions. They are usually slightly higher including return for the risk involved in violating price fixing laws.

the setting of floors below which transactions may not take place. It is usually the child of the seller's emergency although it can be used to the benefit of the buyer if it is prescribed as an inducement to increase production. This is particularly true in time of war. Examples of minimum price fixing have already been discussed. They include valorizations and restrictive schemes organized on a national and international basis.

As in the case of maximum prices, the minimum price can be set at one of three levels as compared to what would prevail under free competitive conditions. It could be set higher, lower or just equal to competitive conditions. Since the last situation is similar to that of maximum prices it need not be discussed. If the minimum price were set lower than that which would prevail under unrestricted competitive conditions, little effect would be felt for prices would remain at normal levels and no significance would be attached to the price fixing until prices fell somewhere near to the established minimum. This leaves then only the situation where the minimum is established at a level higher than would ordinarily prevail. Under these circumstances there would be a decline in demand and an increase of supply, the higher price discouraging the consumer and encouraging the producer. The extent of change in either demand or supply would depend on the degree of elasticity of the product

involved.[1]

When price is fixed at an artificially high level it can be stated without too much hesitation that the demand will decline. We assume that people act in a rational manner, an assumption which, though the exceptions to it are numerous, generally holds true. If the price is high, then, the law os substitution will operate and the consumer will prefer to purchase a substitute which will afford him a comparable satisfaction. This situation prevailed in the operation of the Stevenson Rubber Plan. The British fixed the price at a relatively high level which aroused public sentiment in the United States, its best customer, to the point where conservation measures were adopted and substitute product, reclaimed rubber, was developed. The effectiveness of these measures is indicated by the fact that tire replacement per car in 1925 declined to 1.98 the lowest ever recorded.[2] In order to make minimum prices effective under these conditions, it becomes necessary to fix the price of substitute products as well. It is not always possible to immediately determine what the substitute will be thus the difficulties in this connection when such a program is carried out on a wide scale present many knotty problems.

The statement that high prices will stimulate in-

---

1. See discussion on elasticity below. Page 19.
2. Whittlesey, C.R., GOVERNMENT CONTROL OF CRUDE RUBBER, Princeton University Press, 1921 pp. 139-40.

crease in quantity needs little proof. When price is fixed under normal competitive conditions it tends to be lower than the conditions set down in this case. By fixing the price higher everybody is guaranteed a profit. Even the high cost producers who would ordinarily be pushed out of the picture can now operate at a profit and can increase their production profitably. There will also be a tendency for capital and labor to migrate from the less profitable industries to the more profitable, causing additional increase in supply.

The development of forms of evasion is also an important factor in the fixing of minimum prices. As the supply increases due to the stimulation given producers and the decrease in demand, inventories will accumulate which must be stored and financed. To the extent that the producer is able financially to carry this burden the program will be successful. However, when the burden becomes too great to bear the producer seeks a way out by selling his accumulated inventories at prices below the legal minimum. These evasions take the form of tie-in sales, credits for unwarranted damage or imperfection, and rebates of commissions and transportation charges. Conditions such as these may lead to a breakdown of the entire price fixing system.

3. A fixed range of prices. The fixed range of prices refers to the situation where both the maximum and minimum price of a commodity are fixed. The movement of prices is limited within a predetermined range, the limits of which

provide a ceiling and floor beyond which prices cannot move. The device has been utilized in a few cases all of recent date.

In 1923 the fixing of maximum and minimum prices was authorized in Argentina. In this case, however, the maximum and minimum applied in different circumstances. The minimum applied to the purchase price of beef and cattle, intended for export and the maximum prevailed for domestic consumption. The intention was to protect the producer against low prices abroad and at the same time to protect the consumer against high prices at home. The same system was used for grains in Germany during the depression. The Socialists feared that because of the shortage of gold and foreign exchange grain imports would be reduced and prices would skyrocket. The farm bloc feared the opposite development, that after the war debt question had been settled, foreign exchange would be available and Russian and American grains would overflow their markets at very low prices. A compromise was effected with both sides voting for a plan which included the setting of both maximum and minimum prices.[1] The compromise proved to be very satisfactory. Other instances are milk in Hungary and rice in Japan.[2] In Hungary a minimum was established to be paid producers and a maximum for retailers thus affording protection for both producer and consumer. In Japan the government offered to buy or sell at fixed prices within a given range

1. Hirsch, Op. Cit. pp. 105-106.
2. Ibid.

attempting to accomplish similar purposes. These examples are indicative of some of the circumstances and methods applicable in the fixed range of prices.

The difficulties ensuing in this type of price fixing are those discussed under minimum and maximum price fixing. Inasmuch as price at a given time will prevail at a single level the difficulties involved depend on the level of prices in relationship to the range established. At one time one set of difficulties may be involved and within a short period of time conditions may have changed so that the opposite difficulties are involved. Changes in maximum or minimum prices should be considered not only in light of the immediate conditions but also in light of future possibilities.

4. A fixed price relationship. The fixed price relationship refers to fixing the price of a commodity according to a predetermined ratio to that of another. A base period or base price is selected and the current price tied to this usually on a percentage basis. If the base price is a fixed price then the current price will be fixed. However more usually the base price is selected over a period of time which allowed some fluctuation and the current price usually allows the same fluctuation.

There is a basic fallacy in setting prices on a fixed relationship. It is assumed that an unchanging relationship exists between two commodities and that they will continue to have the same relationship in the future as in the

past. While this may be true for a period of time with some commodities it generally does not hold true. Society does not stand still. There are new advances being made all the time. Relationships between commodities are dynamic, constantly changing, thus as the base period recedes into the past, the current price becomes outmoded and presents many difficulties.

Perhaps the best example of price fixing on a price relationship basis is contained in the parity concept on which agricultural prices in this country are fixed today. The idea of parity prices developed among agriculturalists in the late twenties. The desired goal was that agricultural products regain and maintain the same purchasing power with farmer bought products which existed in the base period 1909-1914. This period was chosen as a normal period when the relationship existed on an even basis.[1] The device was incorporated into New Deal legislation to aid the farmer during the depression, but it was not until August 1941 that the index of agricultural prices reached the desired level and restored the ratio of agricultural prices and prices paid by the farmer to 100 percent. This was brought on as a direct result of the war which changed the conditions of plenty in which the parity concept was born to conditions of scarcity. Under the new conditions the parity concept was still maintained. It was embodied into the Emergency Price Control Act of 1942 as a

1. Hirsch, Op. Cit., Appendix B, p. 229.

formula to prevent undue increase in the prices of agricultural products.

It is obvious now that the long cherished parity concept is very much inadequate. It is based on an inter-relation of prices of agricultural products which though correctly reflecting price relationships in those years does not do the same today. Since that time production costs for grains and other field crops have gone down owing to the development of new machinery. The cost of foodstuffs not subject to machinery has gone up. There has been a change in nutrition habits which has increased the consumption of dairy products. The same relationships just do not exist so that the parity ideal for which agriculture has struggled is now inadequate to meet present war needs.[1]

---

1. Black, John D., PARITY, PARITY, PARITY, The Harvard Committee on Research in the Social Sciences, 1942.

CHAPTER VI

INDIRECT PRICE FIXING

Indirect methods of price fixing have been adopted in an increasing number of commodities since World War I. They were introduced during the war and used during the inflationary period of the twenties. However, it was after the collapse of the boom that they really came into their own. After the depression had been in effect a short time the attitude that the government could prevent the full impact of deflation became prevelant. Government machinery to achieve this purpose was created. The general thought was to regulate the forces of supply and demand and thereby to influence the level of prices, and it was hoped that such interference would turn the tide and at the same time mitigate the ill effects of the depression.

Limitation of Supply

Limitation of supply can be attempted through general methods which attempt to limit supply generally or it can be attempted by methods which attempt to limit supply in a particular market. We shall discuss the general methods first.

Limitation of total supply available can be accomplished either by destroying the present supply or by limiting the new supply coming into the market or by both. Many examples are recorded where destruction was adopted as a method

of influencing price. The experience of the Brazilian coffee valorization is well known. As a result of the activities of the valorization authorities supplies accumulated which became so burdensome that it was necessary to embark on a program of destruction in an attempt to return the commodity to a sound basis. Over sixty million bags of coffee were destroyed under this plan.[1] In the United States a similar program was pursued under the AAA. Six million pigs were killed in 1933.[2] One hundred and ten million dollars was paid to cotton growers for destroying part of the growing crop.[3] Other examples are available to show that destruction can be used. However, except in rare instances, destruction is not a powerful tool. Its value lies only in the short run. The real problem is to control the supply coming into the market and it is in this that we are more interested.

The most widely used method of limiting supply has been to control new production, usually through the adoption of production quotas. Under the quota system the total supply to become available is determined by control authorities and then apportioned among producers on the basis of past production or sales. This apportionment is in the nature of a production allotment beyond which the producer may not produce. In this way a good degree of control over new supply

---

1. See discussion below. Page 22.
2. Backman, GOVERNMENT PRICE FIXING, p. 195.
3. Fairchild, Furniss, Buck and Wheldon, A DESCRIPTION OF THE NEW DEAL, Macmillan Co., N. Y., 1935, pp. 80-83.

coming into the market exists. The extent of exactness of control depends on the industry involved, with manufacturing generally being easier to control than agriculture. In manufacturing it is, within limits, possible to determine production capacities, and to control these by proper disbursement of resources. In agriculture the problem is more difficult since the number of producers is large and production depends on the niggardliness or bountifulness of nature.

There has been in recent years a large number of attempts to limit supply by means of production control. We have from our previous discussion examples in the Chadbourne Sugar Plan, The Brazilian Coffee Valorization, The International Tin Committee, The Stevenson Rubber Plan, and the A.A.A. In most of these cases control has been relatively successful in reducing supply to the predetermined amount. It is evident that this method has found widespread acceptance.

The leading argument advanced in favor of production control is that by limiting supply it is possible to raise prices to a profitable level, more profitable certainly than would exist if the market were burdened by excessively accumulated inventories. Theoretically this holds true, but much depends on the method applied. In the coffee experiment, for example, the government required all coffee to be shipped to government agents who in turn controlled the price by limiting exports. After two particularly fruitful years government inventories became so overburdening that the

destruction program already mentioned had to be undertaken. Under the A.A.A. the effects of plowing under crop land were offset by unexpected increase in yield per acre. Theoretically by limiting supply price should rise. However the dynamics of the economic machine do not always bring about this result. Too many factors are operating. Demand is uncontrolled. Nature cannot be controlled. There are a thousand and one factors operating which may more than offset the decrease in supply even after it has been brought about.

One of the bad effects of a restriction scheme is that it interferes with the natural process of distribution of labor and capital. Under purely competitive conditions price would remain low until capital and labor were driven from the unprofitable occupations into the more profitable ones. With restriction price is maintained and there is a shift in the marginal producer. High cost producers which ordinarily would be driven out are allowed to stay and costs tend to be higher than they would be if the production were distributed among the more efficient procuders. Also of significance is that restriction may create idle labor and capital. In a period of increasing business activity this is not too important for the surplus labor and capital is readily absorbed in new production. On the downward swing of the cycle this becomes very important because it creates surplus labor and capital which cannot find employment at a time when such employment is badly needed. Surplus labor is certainly no

better than surplus inventory.

There are many methods other than production quotas which have been used to limit total supply of a commodity. These include limitation of machine hours and working hours, control over planting and acreage, and control over establishment of new capacity. These are not all, but it must be remembered the problem depends on the particular industry and conditions involved and that often special techniques are developed to fit the needs of a particular situation.

Limitation of machine and working hours has been used as a supplementary method in price control. It involves two alternatives; either to keep part of the machinery idle and to maintain the same work week or to reduce the work week without interfering with the former, or possibly both.[1] The mechanism was used most frequently in the N.R.A. codes where provisions were adopted providing for limitation of number of hours or shifts which machines could operate. At best it affords a loose form of control and if used alone may cause difficulties far out of proportion to benefits received. The prime value of this method lies in its effect as a supplement to other methods of supply limitation.

Control over planting and acreage is the method used to limit the production of agricultural products. This

---

1. Reduction of hours is not to be confused with minimum hours in the minimum wage and hour laws. While the effects may be similar the purposes are very different.

method assumes that there is a strong correlation between the amount of seed planted, the number of acres planted and the size of the crop, and thus by controlling planting and acreage the total production may be limited. In the long run there is probably a very high degree of correlation, but over a short period of time it is obvious that little reliance can be placed on this. Such control, then, is very broad and without any assurance of exactness, the applications depending on the produce involved. In the case of rubber, for example, this control can be used only as part of a long range program since a period of six years is required for a rubber plant to mature. Very often in this six year span conditions have changed and different expedients are required. For products whose period of growth is not so long this control can be used with much more efficiency inasmuch as it is possible to change requirements from year to year.

The most outstanding experiment in this type of control was the A.A.A. In this experiment the curtailment was at first voluntary, but limitation was effected by subsidy payments which motivated the farmer to limit his acreage and planting. When the voluntary method became unsatisfactory, effectiveness was maintained by making curtailment compulsory.[1] Under this program it was found that there was an important

---

1. Bankhead Cotton Control Act provided for tax equivalent to 50% of the average market price for cotton ginned in excess of quotas.

difference between control of acreage and control of planting. It was fairly easy to check on decrease in acreage, but rather difficult to enforce decrease in planting. Production quotas based on past production were established, but the farmer could not adhere to these. The size of the crop depended not only on the amount of seed planted, but also to weather, irrigation, insects, fertilizer, etc. Thus in 1933 although the acreage was reduced by twenty-five percent the crop was slightly larger than that of the preceding year.[1] The A.A.A. proved decisively the impossibility of accurately controlling the supply by these methods alone.

In the manufacturing industries, when supply becomes excessive, it is possible to exert some influence on the supply coming to market through control of new capacity. This involves control of new capacity entering an industry and also control over expansion and modernization of existing capacity. However, as in agriculture this control must be accompanied by production quotas for it is possible to work existing equipment longer hours or extra shifts and thereby make up any deficiency caused by control of equipment. Limitation should be broad enough to allow for the introduction of improved machinery, otherwise industry will be frozen at a given level and will not be able to advance through the use of technological improvements. It should be noted here also

---

1. Richards, H.I., COTTON UNDER THE A.A.A., Brookings Institute, 1934, p. 36.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

that control over capacity is in itself of little value unless used as a supplement to other measures in a coordinated program.

Limitation of Supply In A Particular Market

Limitation of supply in a particular market is distinguished from those controls aimed to limit supply in the total market. Many experiments have been a combination of both types of control; in fact, a combination of both controls is desirable. For our purposes we will distinguish the limitation of supply in a particular market from general limitation by referring to the former controls as marketing controls and the latter as production controls. We have already examined the general production controls. We shall now turn to the marketing controls. These fall into two broad classifications, those which operate through regulation of exports and imports, and those which have to do with surplus manipulation.

Controls over exports may be undertaken to effect the price in the world market or to effect the level of domestic prices. Those which attempt to control price in the world market most always use the export quota device. Under this device quotas are assigned to the participating countries for the purpose of controlling the amount of goods shipped from each country. Outstanding experiments in which this method of control has been used include: the Stevenson Rubber Plan, coffee valorizations in Brazil, the Chadbourne Sugar Plan, and the International Tin Plan. In our previous

studies of these plans we have seen some of the reasons why these experiments have not always worked. In the coffee valorization exports were controlled but no attempt was made to control production, and the control collapsed of its own weight. In the Cuban sugar restriction this pitfall was avoided and the plan met with more success. However, in all fairness it must be mentioned that the difficulties involved in control of production of sugar are far less than those which would have had to be met had control of production of coffee been attempted. In the Stevenson scheme we saw control attempted without proper consideration of supply from outside areas. The participating countries benefited from the higher price, but this was more than offset by the loss of world markets to the Netherlands East Indies, which was motivated to increase its production by the artificially high price. In the Chadbourne plan another difficulty was presented. Here argument between two participants was instigated by the fact that Javanese producers were able to produce at lower cost than the Cuban producers and thus objected to the continuation of the restriction. They realized that because of their low cost they could supply a good proportion of the world's needs at a price which would still be profitable. Under the restriction scheme the price was higher, but the curtailment of production had brought adverse effects on their domestic economy. The problem was the dissatisfaction of the low cost producers, one that is always present in a

joint venture of this type. Another problem is that of consumer resistence resulting in a shift to a substitute product. Under export controls or international agreements, particularly in those agreements in which the participating countries are not consumers, this difficulty is very important, for if prices are allowed to rise to unnecessary high levels, it is almost certain that the consuming countries will search for a substitute. The case in example here was the Stevenson Plan. The high price of rubber brought loud protests from the United States and a gradual change to reclaimed rubber. These are some of the problems we have already encountered. They are frequently met in the attempt to control world supply through regulation of exports.

Control over exports may be used to control price in the domestic market. This type of regulation is intended to influence the domestic price by stimulating exports of surplus products rather than by decreasing the quantity available for sale in the domestic market by limitation of production. "In essence most of these schemes take the form of dumping measures. If the commodity cannot be sold abroad in the normal course of business, it would either have to remain at home and depress the domestic price or be dumped in foreign markets."[1] It is to be expected that this control would lead to strained international relationships.

---

1. Backman, Op. Cit., p. 221.

Often dumping in foreign markets is encouraged by the payment of a bounty to the producer for that portion of his output which is being exported at lower prices than prevail in the home market. By encouraging exports less supply is available for the domestic market, and the producer receives a higher price than he would otherwise get. Bounties are paid in the form of equalization fees or import certificates. Under the equalization fee device the surplus above domestic requirements is exported, the difference between the export price and the domestic price being made up by a differential loan assessment on each unit of domestic production. This device is usually used in agriculture.[1] In the use of import certificates, certificates are issued to exporters of specified products who may use them to pay import duties on the same or other specified products. These certificates are transferable and are readily sold to importers who buy them at a small discount, and use them to pay import duties.

One defect in the use of bounties is that it is difficult to estimate what the domestic demand will be and this may result in over exportation which causes a higher domestic price. This in turn causes a decrease in domestic consumption and an increase in domestic supply necessitating further surplus exportation. The only one who benefits is the producer. The consumer is adversely affected by having

---

1. Black, J.D., AGRICULTURAL REFORM IN THE UNITED STATES, McGraw-Hill Book Co., New York, 1929, p. 232.

[illegible]

to pay a higher price than is necessary and very likely will become irritated with the knowledge that foreign consumers can buy the product of his labor at a lower price than he can. With the growth of strong economic nationalism and its concomitant high tariff barriers, the utilization of export bounties has become less practicable since the markets in which dumping can take place have all but disappeared.

Within recent years control over imports has been used very frequently. Such control takes the form of import restrictions which attempt to regulate commodities which a country does not produce in sufficient quantities or in the production of which a country is relatively less efficient than other countries from whom the same goods may be obtained. The devices used include tariffs, import quotas and import monopolies. The tariff has been the most widely used.

For a commodity which is on an import basis the tariff is an important device used to regulate domestic price, for invariably the domestice price will tend to equal the import price. If imports are needed to fill the gap in domestic demand then they will be added to the total supply and cleared at one price which will be in the region of the import price. If they are dumped at a price lower than the domestic price, the latter will drop to the import price. If a tariff is used, domestic price will tend to equal the import price plus the tariff duty.

It has been found desirable to maintain the price

of imports at an unchanging level so as to avoid the effects of changing conditions in the world markets. The mechanism designed to do this is the sliding scale tariff. Here the duty is altered on a sliding scale as the price in the world market varies. Assume for example that domestic producers of wheat were satisfied to have a price of $1.50 per bushel. When the domestic price was $1.25 then the duty would be $.25 per bushel. If it fell to $1.00 then the duty would be $.50 per bushel. If the price rose above $150 then foreign wheat could come in duty free. It can be seen that as long as we import wheat and as long as import prices do not go above $1.50, the price of wheat will tend to be at that level. The same effect can be accomplished by a high fixed tariff; indeed both methods have been used. However, the sliding scale method does have a degree of flexibility which is lacking in the fixed tariff. The one big defect in the sliding scale device is that it does not allow for technological improvement and must be constantly revised to provide for this. If improvements in production in an exporting country result in a decline in price, the consumer in the importing country does not receive the benefit of this improvement in the form of lower price.

The total quantity imported can be controlled with a high degree of exactness. The devices used to do this are the import quota and monopoly. Under the quota system a quantity quota to be imported is set up for each commodity

for a specified period of time and imports are restricted to that quota. It is possible that imports may be less than the quota, but they may not exceed it. By limiting the quantity in this manner competition of imports with domestic products will be minimized and it becomes possible to fix the domestic price at a higher level than would prevail if there were a constant danger that imports would depress the price. The emphasis is on quantity and not price and to that extent it is easily administered. However, it does have a disadvantage in that it practically excludes the possibility of world conditions affecting domestic price. Under the tariff shortages can be made up by importing even if at a higher price. Under the quota system when the quota limit has been reached no more can come in. The price then fluctuates according to the local supply and these fluctuations can often be very sharp and the cause of much uncertainty. The import monopoly reflects the meaning of its title. It is a centralized buying unit which has the sole right to buy imports. It generally buys domestic goods at a higher price than import goods, averages this with the import goods and sells the total supply to the consumer at a price which will enable it to break even. In effect it is a subsidy paid to domestic producers by the consumer.[1]

---

1. All import restrictions may be considered subsidies in the sense that the consumer pays a higher price than he ordinarily would.

We have been looking at export and import controls as devices used by governments to regulate price in a given market. Inasmuch as the subject is today a vital one, it is impossible to leave it without some mention of the theory behind it. Import and export controls are instruments which restrict international trade. They prevent countries from gaining the advantages of geographic distribution of labor. As it is put by John Stuart Mill,

"If two countries which traded together attempted to produce for themselves what they now import from one another, the labor and capital of the countries would not be so productive, the two together would not obtain from their industry so great a quantity of commodities as when each employs itself in producing the things in which its labour is relatively most efficient."[1]

This is the classical doctrine of international trade. It is objected to on the grounds that cheap labor in one country enables that country to out-compete the country where labor costs are higher. This may or may not be true, depending on the conditions. The important thing to note is that it is not the cost of labor which enables a country to sell its goods cheaper than other countries. It is the efficiency of its labor. To the extent that a country insists on producing goods in the production of which it is less efficient than other countries, it is a tax on its consumer and makes for a lower level of living. It is realized of course that such controls cannot be abolished by the action of one country by

---

1. Mill, John Sturat, PRINCIPLES OF POLITICAL ECONOMY, Appleton & Co., New York, 1880, p. 131. Vol. II.

itself. Reciprocal or joint action is necessary, and the abolition should be gradual over a period of time. For a world of civilized nations this goal should not be too difficult to achieve.[1]

Turning from export and import controls we shall now examine how it is possible to effect the total supply by surplus manipulation. The purchase of surplus stocks to prevent them from depressing the market has frequently been adopted as a method of indirect price fixing. Stocks may either be purchased from producers or withheld from the market under a loan program. Experiments have been attempted involving either one or a combination of both methods. We have examined some of these in our previous discussion, and found that most of them resulted in failure. There are a number of reasons for this. First of all many of these plans have been attempted without the necessary supplement, production control. The result has been that when the price was raised, demand declined and supply increased necessitating further accumulation of stocks. Many plans, particularly those of an international nature, were undertaken without full control of the available supply. These eventually failed because those producers outside of the plan were able to increase their production and take advantage of higher price at the expense of

---

1. The only logical argument for barriers to international trade is that they are necessary to maintain inefficient industry in a world of military and economic insecurity.

those engaged in the control. To avoid this danger the scheme should, as far as possible, be made compulsory for all producers who are materially able to effect the total supply. Another difficulty often encountered arises when governments attempt to dispose of accumulated stocks. It will be recalled that stocks are withheld with the intention of releasing them in the lean years when they are needed. The difficulty here is that opportune lean years do not turn up when expected. This necessitates excessive storage charges and large losses. If the government attempted to minimize its losses by disposing of some of its stocks the cry would arise that the government was competing with its own citizens. If these stocks were dumped abroad, it would not be long before trade barriers would be adopted preventing this. Distress stocks are very difficult to dispose of and usually the cry of dissatisfaction comes from those groups who have been helped by the government's action in accumulating the stocks.

Government loans to producers is another form of surplus manipulation. Loans are granted to the producer making it possible for him to withhold from the market supply which would depress the price. The idea behind these loans is that the producer is placed in a position where he can withhold his supply from the market until such time as he is able to oftain a better price. The most familiar example in the United States is that of the Federal Farm Board where, despite large loans, the Board was not able to control the

price of wheat and cotton. The difficulties here are similar to those noted above. It is not always possible to dispose of the stocks at a higher price, in fact in most experiments these stocks have been disposed of at a loss. There is also a strong tendency to set loan values too high so that eventually the government owns all the accumulated stocks and incurs most of the loss.

Limitation of Demand

Limitation of demand involves conditions exactly opposite to those which would exist under limitation of supply. As we have seen previously, limitation of demand is necessary in a buyer's emergency and purports to bring relief to the consumer. Market conditions are those of scarcity in which a seller's market prevails. A seller's market may prevail for a single commodity as for example, in a monopoly where one or several firms control the market and limit the supply so as to get a higher price; or it may exist in general for all commodities as in time of war when industries which normally produce goods for civilian consumption are engaged in the production of munitions of war. Problems of government control over monopolies, while related to the subject of price control, involve analysis of conditions peculiar to monopoly alone, and for this reason we shall exclude them from our discussion. Our main interest lies in the limitation of demand under general conditions of scarcity.

Is limitation of demand through government effort desirable? The answer to this question depends on the conditions prevailing. In time of war, however, it is not only desirable, but necessary. When goods which normally flow to civilian consumers are diverted to other purposes, a scarcity will prevail which will cause increase in price. The government may attempt to fix prices directly, but any such program can hardly succeed unless it is supplemented by measures which will decrease the demand to a point where it will approximate the supply. To the extent that demand is greater than supply forces will exist which will bid up the price and negate the effort of the government to fix prices directly. The total supply available will not be distributed equitably, those with higher incomes getting more than their share of available supply at the expense of those with small incomes.

It can be seen that under conditions of scarcity limitation of demand is one phase of a general program of price control aimed at avoiding inflation. Inflation may be defined as a condition where there is more money than goods. It is possible to describe degrees of inflation according to relative abundancy of goods and money at a particular time. It may come about by increase in credit and currency or through decrease in goods, or as is usually the case, through conditions in which a combination of these forces is working. Conditions of scarcity are particularly conducive to inflation, for if left unhampered, the propensity to acquire goods in-

stead of money will raise prices to the point where economic machinery will not operate. The process of distribution of goods will cease and chaos will prevail.

To avoid inflation under conditions of scarcity a coordinated program of price control must be undertaken, in which the direct methods are supplemented with the indirect. Price cannot be fixed unless the demand is regulated. This involves rationing. The demand cannot be regulated unless the excess purchasing power which makes this demand effective is drawn off. This involves taxation. To the extent that taxation does not completely draw off this excess purchasing power an inflationary gap will exist and will necessitate the use of some form of savings, either voluntary or forced. These are briefly phases of the coordinated program of price control which aim to limit demand as a means of avoiding inflation. We shall discuss each phase in itself and in relation to the general program.

Rationing.--Rationing is the method by which scarce commodities are equitably distributed. The idea is not new. It has been used in the past in besieged cities to conserve scarce supplies and to maintain order. It was used on a national scale by the Germans during World War I, and during the period of runaway inflation which followed the war. In World War II it has again come into use on a similar pattern. "It involves the distribution of fair and equal quantities to every individual of the same consumer class by means of

quantity ration cards, booklets or certificates."[1] Today rationing has many forms, but the basic outlines are similar in all countries.

Rationing may be general or specific. Under general rationing expenditures for specific commodities are rationed; under specific, quantities of specified commodities are rationed. General rationing was first proposed by M. Kaleki, and was endorsed by other students of the plan.[2] The exponents of this plan held that specific rationing would involve the use of numerous sets of coupons and cause excessive difficulties of control and administration. They argued that the poor who do not utilize their rations to the fullest extent would be able to transfer the remainder to the rich and thus minimize the effect of rationing. They felt that under general rationing these undesirable features would be eliminated. Total maximum expenditures would be fixed for adults and children and for those doing heavier work who required additional rations. The maximum expenditure would include the sum total available for consumption with the exception of those items which were plentiful and did not have to be rationed, or those which could be better controlled by other methods. The opponents of the plan insisted that it would be unwise to allow retailers to sell goods without coupons and

---

1. Hirsch, Op. Cit., p. 136.
2. Kaleki, M., GENERAL RATIONING, Institute of Statistics, Oxford Bulletin, January 11, 1941.

that if coupons were used the administration would be excessively cumbersome. The most outstanding advantage of the scheme would be that consumers and retailers would handle only one set of coupons. Specific rationing of some commodities would still be necessary and it would still be possible for the poor to transfer their unused coupons to the rich. The plan was widely studied, and while endorsed by many, it never gained popularity among government sources and has thus never been attempted. A plan of this type would be instrumental in bringing about the necessary reduction in civilian purchases. However, it is bound to bring difficulties in communities where living standards of various groups of the population are highly differentiated.[1]

Specific rationing may be applied in those instances where it is possible to ration quantities of specified commodities. The most important prerequisites are that the commodities have a reasonable degree of uniformity and can be easily divided. In this country specific rationing has been applied to gasoline, sugar, coffee, and shoes. In Europe it has been generally confined to foodstuffs.

A variant of specific rationing is group rationing, sometimes called point rationing. It involves the grouping of commodities, such as canned goods, meats and fats in the United States and clothing in Germany and England, with an allotment

---

1. Spiegal, Op. Cit., p. 196.

of points made for a specific period for the group as a whole. The different commodities within the group are assigned point values which may be changed from time to time depending on their relative abundance or scarcity. The plan is advantageous in that it lessens the number of coupons necessary as the number of commodities needed to be rationed grows larger, and in that it allows a freedom of choice which is necessary, inasmuch as requirements vary from individual to individual and place to place.

Another variant of specific rationing is that which is carried out under license or special permit. It is used for those commodities which are very scarce and require careful distribution. Tires and automobiles have been rationed in this manner in the United States. The Germans have used it for shoes and overcoats.

One of the most difficult problems facing rationing authorities is the fixing of the amount of the commodity to be distributed. Under specific rationing this involves the setting of coupon values; under group rationing it involves determination of point values. In a free market, supply is cleared either by a drop or rise in price, which may take place within a very short space of time. When a commodity is rationed and point or coupon value set, it takes time for the authorities to survey the market and to determine whether or not the supply has been cleared, and it is difficult for them to set the ration exactly at the proper value where at a given

price, the entire supply will be cleared. If the ration is fixed too small, spoilage may occur. This will bring valid cries of complaint from the retailer who is forced to take a loss by virtue of unwise judgement in which he has had no voice. If losses are very great, there will be strong temptation on the part of the retailer to unload the excess supply in violation of the rationing program. On the other hand, if rations are fixed too large, shortages will occur, not unlike those which would occur in a system of price control without rationing. It is very important that rationing authorities have available detailed market data indicating changes likely to occur.

There are numerous supplementary measures which must be instituted to achieve a successful program. Rationing must be comprehensive, not only including those commodities which need to be rationed, but also including all stages of the productive and distributive process. If, for example, coupons are given by the consumer to the distributor, he must in turn give them to the producer who is also limited in his distribution by the number of coupons he receives. The ration program must apply to these levels, for it is impossible to accomplish equitable limitation of demand unless control is so extended. One of the technical difficulties in this control is that the handling of coupons becomes excessively cumbersome by the time it reaches the producer. This has been overcome by the use of the ration bank. Coupons are

deposited through regular banking sources and special accounts kept. Instead of handling large amounts of coupons, checks are drawn, and, like money, balances in coupons are transferred from one to another. This method has been highly successful in securing adequate control beyond the distributive stage.

The word 'rationing' implies the idea of equal quantities fairly distributed.[1] Precise equal rationing, however, can almost never be accomplished; indeed, it is not to be desired. An adequate ration program should be flexible enough to allow for extra rations where they are needed. Special categories should be created for laborers doing extra hard work, such as miners, foundry and munition workers. These men, because of the nature of their work, need special foods or larger rations. Children and pregnant mothers need extra amounts of milk. Equality, while implying democratic fairness, is not always practical, thus it is advisable that there be sufficient flexibility to provide for special circumstances. The British have been particularly successful in this respect. They have made wide use of the "canteen system" under which large groups are fed by the government at low cost. Special diets are prepared containing nutritional values for the needs of different groups. They have distributed fruit juices, cod-liver oil, and milk to expectant mothers and to school children.

---

1. Distribution of equal quantities does not allow for differences in quality. Rationing may be formally egalitarian, but it places the poorer at a disadvantage by requiring the same number of coupons for cheap and expensive articles.

They achieved not merely limitation of demand, but wise limitation of demand.

Taxation. To the extent that rationing does not succeed in limiting demand to the point where it approximates supply, a gap will exist which will be closed in part by voluntary savings and in part by inflationary increase of prices. As it is put by Spiegel,

"Forced abstaining occurs when people are made to pay taxes out of their current income, leaving them only part of their dollar income for consumption, or when dollar income available for consumption is left intact, but buys only a smaller amount of goods."[1]

Inflation automatically closes the gap that is left by inadequate rationing. Taxation, in that it is a means of drawing off excess income which would otherwise be used to bid up prices of existing supply, is an expediant which will help to avoid inflation.

It is to be noted that if minimization of inflation is desired, particularly in wartime, neither the principle of "ability to pay" or "benefits received" can be allowed to stand in the way of limitation of demand. These principles may be workable in certain periods of a relatively slow changing economy, but must be set aside under the threat of approaching inflation. In such an emergency taxation should be primarily designed to reduce the rate of consumption.

In recent years all tax systems have tended to be-

---

1. Spiegel, Op. Cit., p. 129.

come more progressive, that is, they have levied a higher percentage of income from the wealthy than from the poor. With the increased need for government revenue this was found to be very practical. In proportion to sacrifice, it was found that the rich could pay a larger percentage of their income at less sacrifice than the poor. It was also found that the rich saved more of their incomes in proportion to the poor and were, therefore, more able to pay taxes than the poor. If the tax system is progressive, it helps very little to make it more so, for the additional income to be derived is that which would ordinarily go into savings. The problem in limitation of demand is not to reduce the accumulation of savings, but to reduce accumulation which would be used to bid up prices on scarce commodities. The emphasis should be more on regressive taxation, that which will levy income from those groups which do not save.

Regressive taxation can be achieved by changes in existing forms of taxation and by addition of new forms. In the past the tendency has been to rely on the income tax as a main source of revenue. By broadening the base of this tax it becomes possible to include the low income groups, without destroying the progressive nature of the tax in the higher levels. This was done in the case of the Federal Income Tax by lowering exemption levels and by increasing surtax rates on the lower levels. However, it was not accomplished without difficulty. It was necessary to convert the method of

payment so that the income was collected at the source. It was also necessary to forgive a portion of one year's taxes and simplify the forms. In spite of the difficulties at first encountered, the tax is now workable and for the most part is accomplishing the purposes for which the changes were made. The sales tax is a form of taxation purely regressive. It falls on the lower income groups and to that extent is an excellent means of drawing off excess purchasing power. It came into wide use shortly before the war as a means of producing additional revenue for local governments. Although the tax is definitely regressive, it has not been adopted on a national basis in the United States. It is still used as a source of revenue by local governments who have strongly opposed any move by the national government to enter this field. Another form widely used is the commodity or excise tax. Both local and national governments use this form of taxation, but the national government has used it, especially in the present emergency, as a means of drawing off purchasing power. Heavy excise taxes will accomplish exactly this even though they are not levied at the point of distribution. They may be applied at the production end where they are easier to collect, and through a process of shifting made to fall on the consumer who will bear the ultimate burden.

Excess profits taxation is another form. This type of taxation is little help in averting inflation since it absorbs incomes that would otherwise accrue to persons in the

higher income brackets. While such taxes are needed to maintain the morale of labor and consumers who are heavily taxed, they reduce the rate of savings rather than the rate of consumption and are therefore of little value in aiding limitation of demand.

Savings:--Rationing and taxation are means of removing excess purchasing power, but to the extent that they do not succeed in totally removing the inflationary gap they should be supplemented by some form of savings either voluntary or forced. We in the United States have not seen fit to adopt a system of forced savings. This system, however, has been adopted in England and in Germany.

By compulsory savings is meant the transfer of monies to tax authorities who will return them after the emergency is over. These payments are not taxes since taxes are not normally returned to the taxpayer; neither are they loans since a loan implies a voluntary act not a compulsory levy. However, these payments do represent a blending of loans and taxes, a measure which lies half way between the two. The most important proponent of the deferred payment plan has been John Maynard Keynes, the British economist. The plan has come to be known as the "Keynes Plan". He viewed the plan, as an expedient in the war emergency which would withdraw from immediate consumption a portion of each man's earnings to be returned to him after the war was over.[1] While it

1. Keynes, J. M., HOW TO PAY FOR THE WAR, Harcourt, Brace and Co., New York, 1940.

was a wartime measure which would accomplish the purpose of limiting demand, it was not this feature which made the plan attractive to Mr. Keynes. It was rather that deferred payments would provide a reservoir of demand for consumer goods to become effective in the period after the war when cessation of war production would result in business recession. However, the "Keynes Plan" has in it a large element of value. It would withdraw purchasing power from that area needed in the emergency and make purchasing power available in the same area where it would be needed after the emergency. It would to a large measure compensate the poorer classes who actually bear the sacrifice by giving them additional future income. Finally, it would help avoid a possible rise in interest rates which might occur if finance were handled mainly through regular fluctuating treasury issues. Although these advantages were recognized by many, the plan never gained favor in the United States.

The American method has been that of voluntary loans. Unfortunately, these loans have not been taken up by the proper groups and this method has much to be desired. For the most part emergency expenditure in the United States has been financed through banks. The proportion of Series E bonds sold to the public has been small by comparison to other issues and this has resulted in a very great extension of bank credit. Bank credit in itself is inflationary only to the extent that such credit exceeds the rate of savings. If credit were ex-

panded at the same rate of savings the basis of this expansion would be the savings which if not saved would be used to bid up prices of scarce goods. When credit is expanded beyond the rate of savings the additional credit, if not drawn off by taxation, is available to bid up prices and is a threat to inflation. We have seen this operate in the United States where credit has expanded almost to the limits allowed for the Federal Reserve System. There is at present a movement afoot to lower the reserve requirements because additional credit expansion to carry on the war effort is needed.[1] We see here a desire to stave off inflation on the one hand, yet the adoption of measures definitely inflationary on the other hand. The reason for this is that the war expenditure is so great that even if it were possible to drain off every bit of excess purchasing power in the form of savings or taxation, there would be need for additional credit expansion. To this extent the trend toward inflation cannot be avoided. The sale of war bonds directly to citizens on a voluntary basis is likely to result in greater savings were this to be accomplished by natural means, but it definitely does not go far enough in the direction of removing to the greatest extent possible excess spending power. No doubt this would be helped by a plan of forced savings. But it is to be remembered that in choosing a plan of this nature there are other considerations

1. Done by Act of June 12, 1945.

than purely economic ones. It is one thing to recognize what must be done. It is another to do it most practically.

As a practical matter we have relied on the voluntary method. The British, on the other hand, have adopted a variant of the Keynes Plan. They have reduced exemptions and personal allowances on their income tax and increased rates. They have provided, however, for a return in the postwar period in the form of credit with the P.O. Savings Bank of that portion of the tax due to lowered exemptions and personal allowances. Similar return payments were provided for a portion of the excess profits tax. They also use the voluntary loan method, but by making taxes heavy on the lower levels they drain off excess spending power and conserve a portion of it to be used as a deferred demand in the postwar period.

In Germany after most of these methods had been used, there still existed a large inflationary gap. A scheme of advance payments was instituted in attempt to decrease the extent of the gap. The people were sold on a program of paying in the present for a Volkswagen or a national automobile to be made after the war. Here also the idea was to limit demand by drawing off purchasing power which would be used to bid up prices.

In this chapter we have examined limitation of supply and demand as objective aspects of price control. It is obvious that while they may be considered objectively, they must be analyzed in light of the entire economy of which

they are a part. We shall therefore turn to the war economy of the United States and see how these measures and others necessary in a war economy have been carried out.

CHAPTER VII

PRICE CONTROL IN THE UNITED STATES -- WORLD WAR II

The main objective of the war effort is to increase the production of instruments of war. The attempts to prevent inflation and keep down the cost of living and the cost of the war program to the government as well as to prevent post-war collapse, are secondary objectives and are important only insofar as they do not hinder the accomplishment of the prime objective, to win the war. It was with these objectives in mind that price control legislation was considered in the United States.

Legislation and Application

Early in 1941 the EPACS, Emergency Price Administration and Supply Committee, was established by executive order. It was recognized that control of prices and supplies was becoming necessary and that adequate machinery was needed. Inasmuch as EPACS was instituted by executive order, its function was purely advisory. Early orders of price control, selective in nature, were promulgated by the administration and carried out through fairly good cooperation by business. In the latter part of 1941, however, complaints and reports of violations became numerous. It was evident that price administration without legislative authority was impossible.

On January 31, 1942, President Roosevelt signed the

Emergency Price Control Act of 1942. This Act gave to the price administration the powers of enforcement which were lacking for many months after inception in 1941. There were many restrictions, but, exclusive of these, the Act gave to the price administrator powers, broad and sweeping enough to administer and enforce all regulations. The powers of enforcement granted by the act are concerned with record requirements, licensing and injunction, and treble damage suits.

Records:--By the wording of the Act the Administrator is authorized "to require any person who is engaged in the business of dealing with any commodity....to make and keep records and other documents and to make reports."[1] He is empowered to make studies and investigations and may serve subpoenas and enforce the appearance and testimony of witnesses and the production of documents. The records and reports provisions gave to the administrator the powers to gather information and to require maintenance of records, without which price administration would be most difficult.

Licensing and Injunctions:--The section of the act pertaining to licensing was given much consideration and was very carefully written. As finally passed these provisions contain strong safeguards against any attempt to use these powers for purposes other than intended. All businesses were to be licensed, and the administrator would have to have some

---

1. Emergency Price Control Act of 1942. Sec. 202.

control over these licenses to prevent violations. However, it was felt that any provisions giving direct control would be misused. License exclusions were therefore included for farmers, radio and press. The administrator was not given power to deny a license,[1] and more important he could not suspend a license. Upon evidence of violation, he could only issue warning and if this were disregarded and he had sufficient proof, he could then petition the courts for a suspension order for a period of no more than one year. This actually permitted sanction of one sin without punishment.

Of all the enforcement powers conferred by the act the most effective one is that which allowed injunction proceedings. Whenever a violation of a price regulation has been committed or in the judgment of the officials about to be committed, the administrator may intervene by petitioning the courts for an injunction. The possibility of obtaining an injunction enables price control authorities to strike hard and fast so that they do not lose the effect of their regulations. It enables the administrator to stop any immediate violations or to prevent even first attempts.

Treble Damage Suits:--The provisions for treble damage suits give to price authorities the means of enlisting the support of the public in their attempt to enforce price regulations. Persons who bought commodities at prices over

---

1. If a person already had one suspension the administrator could deny reinstatement.

the maximum set by applicable regulations were given the right to sue the seller for fifty dollars or treble the amount by which the price exceeded the maximum, plus all legal and court fees and other costs. The attempt was thereby made to enlist the support of the public in policing regulations which were instituted to protect their interests. Such support is necessary, but is workable only to the extent that those commodities do not become extremely scarce; for in the latter event consumers disregard their common interests and think only of their personal ones. They would rather obtain goods in the black market than insist on the legal price and be unable to obtain the goods. The treble damage provision worked reasonably well at the beginning, but it subsequently became necessary for the Office of Price Administration to institute suits on its own motion.

The Emergency Price Control Act provided the means and power for effective price control, but it still had to be decided what the nature of this control would be. Our previous experience in price control was limited to World War I and there were many who wanted to go back to this type of control. All proposals made boiled down into a choice between two systems, one the piecemeal system of the first war which fixed prices selectively as control was needed, and the other, the overall ceiling on all prices, wages, rents and other forms of remuneration, which was first proposed in 1930 by Mr. Bernard Baruch, former chairman of the War Industries Board of World War I.

The latter system is important in that it was of American origin, but successfully applied by Adolph Hitler. Mr. Baruch, when he proposed the plan, was dissatisfied with the selective price fixing of 1917-18. As he said,

> "The fixing of individual prices at a time when the whole of the rest of the structure is moving upward would be both unjust and confiscatory. In a normal peace-time pattern every price is a resultant of the combination of all other prices...It is evident that we should neither stabilize every price or stabilize no price.
>
> "The theory of fixing individual prices in a period of general inflation is unsound, because at the moment you fix a price under such conditions, all its components are at the same time rising and that price becomes immediately out of date....They (Price Fixing Committee of War Industries Board) discovered that what they were actually striving for was a stabilized, homogeneous price schedule, the very thing that exists at the beginning of most wars. Why, therefore, in any future emergency should we not attempt to capture this while it still exists, at the beginning of the war? To capture it piecemeal later is actually arithmetically impossible."[1]

He proposed to prohibit any changes in prices, wages, rents, and interest rates by an overall ceiling which would ceil these factors as they existed on a particular day. He emphasized the need for immediate action with the approach of the emergency conditions.

The General Maximum Price Regulation

In the discussion preceding passage of EPCA the Baruch plan was rejected by Congress. Yet three months later the idea was taken up and inaugurated by the Office of Price

---

1. Baruch, Bernard M., PRIORITIES, THE SYNCHRONIZING FORCE, Harvard Business Review 19, no. 3:267-70., Spring, 1941.

Administration through the medium of powers obtained under that act. The order instituting this program was the General Maximum Price Regulation of April 28, 1942, more commonly known as "General Max".[1]

"General Max" froze prices of goods and services generally at the retail, wholesale and manufacturing levels, at the highest price which the seller delivered or offered them in March 1942. It provided for the continuance of the same customary discounts and differentials ordinarily given to different classes of customers, and the same prices for the same or similar commodities and services as existed in March 1942. For those services and commodities in which the seller did not deal in March 1942, the highest price was determined by ascertaining the price of a similar commodity or service most nearly like the intended one from the most closely competitive seller of the same class. Provision was made for licensing all wholesalers and retailers and special reporting obligations were established for retailers. The regulation was intended as an overall price freezing and, within the limits set by the EMPCA, it accomplished that purpose. There were, however, several exceptions which subsequently made the regulation inadequate. They are as follows.

1. Under the EPCA there were prescribed four levels

---

1. Published in the Federal Register as Title 32, Chapter XI, Part 1500, Sections 1500.1-1500.25.

the highest of which had to be met before control could be applied to agricultural products. This high level was not reached until approximately October 1942 and allowed these products to increase without control until that time.

2. There were no provisions for freezing wages and salaries.

3. Armaments and military supplies sold to the government or to federal procurement agencies were excluded from price control.

4. Also excluded according to EPCA were books, magazines, motion pictures, advertising and public utility rates.

5. There were exemptions for special institution. Hotels, restaurants, bars, and similar establishments were exempted on goods prepared and distributed on their own premises.

These exclusions from the order left the gate open for increased prices in their respective fields. Cost is not a single element, but made up of the sum of other costs. If overall freezing were to be successful there had to be freezing of all costs. To the extent that all costs were not frozen there were forces at work pushing up costs and eventually a squeeze had to result.

The main reason for the issuance of the regulation, aside from the growing impossibility of administering selective

price control, was threatening wage increases. Wage increases were based on the argument that costs of living were rising and, a freezing of those costs was the only way to refute that argument. However, it was impossible to freeze costs unless labor itself was frozen for labor is a cost in "cost of living commodities" and unless it were kept down costs had to rise. Under "General Max" control of labor costs and agricultural prices were major exclusions. There, therefore, had to be a gradual rolling forward of prices to meet increased costs if a squeeze were to be averted. If this were not done those producers adhering strictly to the regulation would have to retire or, as happened in many lines, there would be gradual evasion either through production manipulation or quality deterioration, making enforcement impossible.

That such a situation was bound to develop was recognized within a very short period of time. To correct this and to bring about a closer coordination of activities in the war effort, the Economic Stabilization Act of October 1942, was passed. The title to the Act reads "To ammend the Emergency Price Control Act of 1942, to aid in preventing inflation, and for other purposes." The Act strengthened the machinery of price control by authorizing freezings of wages and agricultural products. Under powers granted to the President the Office of Economic Stabilization was established. The Director, James F. Byrnes, was appointed by the President and ordered "to formulate and develop a comprehensive national economic

policy relating to control of civilian purchasing power, prices, rents, wages, salaries, profits, rationing, subsidies, and all related matters." He was in effect given control over all war agencies whose activities had bearing on the above factors.

At the same time the President took action under the Act to stabilize wages, salaries, farm prices, and rents. He forbade wage rate increases above the level of September 15, 1942.[1] Control of all wages and salaries was given to the War Labor Board and it became the duty of the Board to maintain this level unless it found increases necessary "to correct maladjustments or inequalities, or to aid in effective prosecution of the war."[2] Where such increases were likely to cause increase in price, approval of the Office of Economic Stabilization was required. Agricultural prices were also fixed at the level prescribed in the Act. Margins of distributors and processors were limited to those in existence in September, 1942. At the retail wholesale and processing level prices were fixed at the scale existing in October, 1942. For those farm products which had not reached the prescribed parity level nothing could be done. Retail costs, however, for these products were kept at the October level and when they did rise the difference was equalized by the payment of subsidies to the

1. This was the date level established by the Act. Sec. 4, Sec. 8, c.
2. The legal power of the War Labor Board was established by the War Labor Disputes Act of 1942 from which this wording is taken. In the "Little Steel" case in July, 1942, the Board promulgated the "Little Steel" formula which allowed 15% increase over the level of Jan. 1941. It has maintained this formula ever since.

processor under authority granted by the Soil Conservation Act of 1933. Legislation had now made it possible for the President to protect the consumer and the farmer. The need was very great. The President's edict to Congress in his Labor Day speech of 1942 will not be forgotten. "You do or I will."

The legislation which provided for control of agricultural and industrial prices also provided for rent control. The war economy had caused great dislocation in this field. The increased purchasing power created by war activity was manifested in a sharp increase in demand for residential houses. The shifting of large numbers of laborers to shipyards and industrial centers caused bottlenecks in those areas. Civilian construction was completely discontinued because of the need for army and vital defense housing. These conditions called for action to prohibit excessive rent increases, particularly in the bottleneck areas, and also to provide new housing accommodations where needed as quickly as possible. Steps along these lines were taken before the passage of the EPCA. The O.P.A. under its own motion organized Fair Rent Committees on a voluntary basis. In 1941, 210 of these were organized in 34 States.[1] This control was gradually extended to every community, and it worked fairly well in those areas not drastically effected by dislocations. The voluntary method did not suffice to solve the real problems, so effective legislation was needed.

1. First Quarterly Report of the OPA. p. 48.

The EPCA provided this legislation. It allowed the price administrator to define "defense rental areas" and gave him the authority to stabilize or reduce rents in those areas. The actual procedure for this was to be carried out by local rent authorities, but if within sixty days after notification, the situation had not been remedied the price administrator could correct it by direct regulation or order. "Defense rental areas" were also included in "General Max". The order defined some 323 areas of this nature and disallowed increases in excess of the rates prevailing in March 1942. Rent freezes were thereby extended to cover over two thirds of the population of the United States.

Up to the present writing rent control has worked fairly well. There are, however, certain exclusions from the rent control machinery which may get out of hand. Business property has not been included in the control and there is the liklihood that when civilian production is resumed on a grand scale, business rents may increase rapidly. Also ceilings have not been established for real estate transactions and some types of property have really boomed. This is important inasmuch as rental value is related to market value and when one is high, it acts as a force pushing under the other. This is borne out by experience in the control of rents of summer property. The value of this type of property has increased greatly and as a result rent control is practically unenforceable. Beach

property rents in areas adjacent to our coastal cities have in many cases tripled their 1941 levels.

By the end of 1942 allover price control was well established as a method in the United States. But no sooner was it established than it became necessary to modify it and gradually ssing away from it. Unfortunately, the allover method was instituted at a time well into the upswing. It was politically impossible and in some cases militarily unwise to clamp the lid on every single price. As we have already seen, many factors were allowed to fluctuate upward after "General Max" so that when the lid was finally put on it was put on at different levels creating squeezes and inequities. Costs in some fields were higher than in others. Margins of markup were in some cases lower than existed previous to the war. Added to this was the fact that government monetary policies did not succeed in removing the inflationary gap. Though credit requirements had been imposed, taxes made higher, and savings programs instituted, government expenditures for the war effort were so great that short of complete totalitarianism, it was next to impossible to remove excess spending power. Temptation on the part of producers and consumers to disobey price control regulations was great. The situation was such that allover price control as we had applied it could not survive.

Price Control authorities recognized even before the issuance of "General Max" that allover price control as of a

particular period would not work. The order was intended as a stop-gap for the rapid increase that was taking place until more specific methods could be developed. The fight was not to freeze all prices as of a certain period and keep them there. It was rather a hold the line effort, an attempt to keep prices as low as possible for as long a time as possible, allowing increases where necessary to make control work. To this effect O.P.A. embarked a policy of price regulations for each particular industry. As soon as possible a survey was made of each field and orders promulgated. These new orders as they came out superseded "General Max" and any previous orders. Gradually over a period of time orders were instituted in almost every field so that today with the exception of a few luxury items such as furs and jewelry there are orders covering everything.

It will be recalled that in World War I price fixing was selective, price being determined by the bulk-line method, which allowed the operation of between 80-90 percent of producers.[1] For each particular product a single price prevailed. In contrast with this "General Max" allowed the highest price which prevailed in March 1942 and it did not necessarily follow that this price was the same for all producers. On the contrary there existed slight differences among different producers and these were carried over in their ceiling prices.

---

1. See previous discussion p. 52.

A single price was the exception rather than the rule. The specific orders instituted after "General Max" also provided for differences in price, but instead of being tied to the highest price in March 1942 they were based on costs existing in a base period. The new method was similar to the fixed price relationship in that prices were tied to a set of conditions that existed in a previous period. However, the conditions varied for each individual producer so that actually this method amounted to a cost plus arrangement. It became necessary for each producer to reconstruct his base period costs and determine the price cost ratio for each product he produced. These ratios were arranged in order of selling price on a chart which served as a guide in pricing all future production. Price rules were formulated which applied as near as possible the price cost ratios which applied in the base period.

The use of the price chart in the cost plus method brought many problems. The idea had been suggested during World War I but the problems of cost determination and enforcement were so great that it was decided to avoid them. The situation in World War II called for much stronger action and it was recognized at an early date that this was the only fair method of dealing with the problem. The only real question which had to be answered was whether the problem of enforcement would be greater than that which the results justified.

Price Fixing in the Wearing Apparel Field

In order to thoroughly understand the new method, it is well that we see it in operation. I have selected for this purpose the ready-to-wear field. This field is of particular interest because the problems of control are exceedingly difficult. The industry is made up of numerous units which normally operate under conditions of keen competition. Besides price the elements of quality and style enter in the competitive picture. Costs vary greatly between producers in the same area, and producers in different areas. The industry on the whole is one which does not readily lend itself to control; yet as we proceeded away from overall price control it became one which needed control most sorely.

Wearing apparel was covered by the original April overall freeze regulation. Prices were to remain at the highest level charged in March 1942 with customary discounts and differentials allowed to the same class of producers. In the ready-to-wear field, however, there was an exception to this. While seasonal goods were kept at the base period level, fall and winter outerwear garments for women and children were allowed to be priced in a manner which reflected increases in material and labor costs, providing that the overall markup did not exceed that charged in 1941. This immediately allowed a differential for those industries producing outerwear garments and to the extent that materials were available there

was some shifting of production to these fields. This exception was however, incidental to the major exclusion of labor freezing from the regulation. It was this latter exclusion which made "General Max" so unworkable in the apparel field.

The provisions of "General Max" required that manufacturers when pricing a new product, determine the price from similar products of the most closely competitive seller of the same class. Many manufacturers used this as an out in avoiding ceiling regulations. Whenever a new style was made, they used this method of pricing, and while they may have kept the same prices as in March 1942, they depreciated the quality which was the same as increasing price. To live within the letter of the regulation, they merely had to find from a competitor a similarly depreciated article and use this as basis of comparison. In this manner it was possible to absorb increases in labor and materials and pass them on to the consumer. Within a year after the April regulation had been in effect there was a gradual depreciation of quality and disappearance of low-price goods from the market. Materials which formerly went into lower brackets were jumped into the next higher range. Prices on similar quality goods were two and three times higher than existed even in the base period.

In the specific orders which followed "General Max" OPA attempted to do away with quality depreciation by using the cost plus method and the price chart. It became necessary for manufacturers to determine according to a prearranged method

the costs of all styles produced in the base period. Detailed provisions in the different orders set forth those costs allowed as direct and those allowed as indirect. The different items produced were blocked off into categories and percentages figured for each price line within the category. When these were all determined they were arranged in a price chart which the manufacturer used in pricing future production. In conjunction with the price chart detailed cost record forms were required for current production. What was done was to actually install in every producing unit a detailed cost accounting system whereby OPA could at a moments notice determine the cost of a particular garment and see whether it was properly priced and billed. The original work in making up price charts was heavy. Many of the smaller manufacturers had no regular cost records and those who did were reluctant to use them feeling that they would get a better break by establishing costs from scratch. However, after the preliminary work was done, the new system did succeed in eliminating quality depreciation to a very great extent. When the cost of a garment was established the manufacturer had now to turn to his price chart and apply the proper markup ratio. He could not, as he previously did, price the garment into the next higher price range merely because he could get the price. Price and quality were now established in a more compatible relationship.

Pricing Chart[1]

Category number	Selling price lines	Terms	Maximum allowable margin	Minimum allowable cost
36	$14.75	all terms 8/10	46%	7.97
	13.75	Eom.Wholesalers	32%	9.35
	11.75	15% off	32%	7.99
	10.75		32%	7.31
32	9.75		41%	5.75
	8.75		41%	5.16
	7.75		20%	6.20
	3.75	Net	15%	3.19
31	4.75	Net	41.3%	2.79
	5.75	Net, 3/10 Eom to chains	38.7%	3.52

The above is an example of a price chart of a manufacturer of women's slacks and slack suits. He must use this to determine his current prices. Three rules are provided for price determination.

Rule 1. A manufacturer may sell in any selling price line listed on the chart providing that selling line is not higher than the highest listed. If he desires to sell at a price listed on the chart, he must use the corresponding minimum allowable cost or if his cost can be found directly on the chart, he may use the corresponding selling price.

Rule 2. If his selling price or cost is lower than that listed on the chart, he applies the average of the

1. Example taken from RMPR 287 Appendix B.

maximum allowable margins for all price lines within a category.

Rule 3. If the selling line or cost is not directly on the pricing chart, but lies between two selling lines, he applies the lower of the two maximum allowable margins to determine his new minimum allowable cost or selling price.

The preceeding example will give an idea of how the price chart works. The pricing rules and methods of determining percentage markups are not the same in all the orders, but the pattern is similar in all regulations, exceptions and special provisions being made for each particular industry. For some industries the percentage margins are figured on selling price; for some on cost. The central idea is that for every selling line it is possible to establish a reasonable minimum allowable cost which the manufacturer must put into his product unless he desires to lower the price in accordance with a lower percentage margin. All costs must be included in the current operation records and be verified by bills so that it is practically impossible, if one lives up to the regulations, to vary quality or raise price unwarrantedly.

The general idea is now clear, but the numerous problems make application very difficult. Provisions have to be made for changes in production, for new manufacturers going into business, for irregularities in different industries, and relationships between industries. Orders must apply not only

to the actual processor, but to the suppliers of trimmings, embroideries, and other component parts of the garment. Each order must be written so that it ties in with the entire price control program and with related orders. Without going into these many problems it will suffice to say that they have been met satisfactorily as they have come up.

In the application of the specific orders a definite pattern has been followed. These orders have been applied first to the processors of raw materials, then to manufacturers, and finally to retailers. In other words control was started at the source of production and expanded gradually through manufacturer, jobber and retailer. The reason for this is obvious. Had control been imposed at any other level in the line of production high costs from the preceeding suppliers would have made it unworkable. In some instances orders were not promulgated quickly enough and rollbacks were necessary. For example, MPR 570, controlling negligees and lingerie, was imposed very late in the chronological schedule and therefore carried a 15% rollback in order to equalize markups. On the whole, however, the control has been instituted at one level and maladjustments have been insignificant.

The cost plus method, while it has worked out fairly well, is by no means perfect. One of the greatest defects is that it does not control the level of production. For example, if a manufacturer made during his base period four price lines within a single category, the natural

tendency will be for him to concentrate on his highest selling line in that category now. Even though his percentage of markup may be the same or even less, it will be to his advantage to produce the highest price line he is permitted, for his dollar margin will be greater at that level while his fixed expense will be approximately the same. Referring to the above price chart, we see that it will be more profitable to produce the $5.75 line in category 31 than to produce the $4.75 line even though the percentage markup is almost 3% less. The dollar margin is $2.23 against $1.96 or 27¢ more at approximately the same overhead cost. This tendency was very widespread in the apparel field. It was perhaps the main reason that low end merchandise did not appear after the specific method went into effect. The specific orders had succeeded in eliminating price increases in the form of quality deterioration, but they did not return to counters the low end goods which were previously so abundant.

The situation in the wearing apparel field became very bad in the early part of 1945. As expressed in S.O. 108,

> "Inflation of distributive margins which is a by-product of the shift to higher price lines, is expressed in the higher dollar margin which comes to wholesalers and retailers as a result of the fact that higher priced goods ordinarily carry as high a percentage markup as lower priced goods, and frequently a higher percentage markup. When most of the goods suddenly become higher priced goods the distributor found himself receiving a substantially larger number of dollars of margin from the average sale of an apparel item than he formerly received. Since his costs per sale are up only slightly, or in many cases actually decreased, his dollar profit has been suddenly greatly inflated."[1]

---

1. Supplementary Order 108, Sec. II, B, (3).

All manufacturers were working on their higher priced lines and as a result low priced goods were not available. To meet this situation OPA issued the M.A.P. or maximum average price plan which forced production in the cheaper lines.

The device used was a fairly simple one and if administered properly should be very effective in producing the desired results. The base period selected was the entire year 1943.[1] Each manufacturer covered by the order must determine the weighted average of his shipments of a particular category during the base period and in his future operations that weighted average becomes his maximum average price, that is, the average of all future shipments in that category cannot exceed the weighted average in the base period. For example if ABC Company shipped in the first quarter of 1943 100 units at $2.00, 200 units at $3.00 and 300 units at $4.00 his weighted average for that category is $3.33 obtained by dividing $2000, the total volume, by 600, the total number of units. In future operations in the corresponding quarter ABC Co. cannot exceed the $3.33 average. If they do, they must go into a makeup period and ship a sufficient number of cheap units until the unit volume below the average has been made up. Under existing regulations this makeup period can last no longer than thirty days after which time, if the unit volume

1. The order permitted averages on a quarterly, semi-annually or yearly basis at the option of the producer.

has not been made up, the maximum average price becomes the ceiling price and shipments at higher prices are disallowed. By this device it becomes possible to force production in customary price lines.

M.A.P. went into effect June 1, 1945. It was subject to serious setback at the start in that it was applied at the manufacturing level and not at the raw material level. Severe criticism was made by manufacturers who felt that they could not produce cheaper items unless cheaper materials were made available. To a large measure their criticisms were justified and OPA has taken steps to remedy this defect. The only real criticism of M.A.P. is that it can work hardship on those producers in critical labor areas who have had a cut in their employment factor since 1943. To produce cheaper goods greater unit production is necessary, and in those instances where severe labor drops have been encountered hardships may result. If discretion is used at the proper time, the order can be workable. That results will be accomplished is attested by that fact that cheap goods, disappeared for so long, are reappearing, this in the few weeks that the order has been in effect.

Another device which has been used to good advantage is the preticketing device. In certain lines, particularly the cotton goods lines it was found that extreme scarcity had brought about highly inflated prices. The OPA in conjunction with WPB issued MPR 578 which required that manufacturers pre-

ticket each garment with the retail price. Fixed percentages of markup were determined for the retailer and detailed charts by which the manufacturer could figure the retail price were provided. The markups established for wholesalers range from 17 to 20 percent on selling price while the markups for retailers range from thirty to thirty-five percent. These markups are lower than what customarily prevailed, but they were justified in that "the demand is great, the cost of selling is reduced, and the risk of markdowns and returns is negligable."[1] The most desirable feature of the pre-ticketing device is that it prevents pyramiding of markups through "cross-stream and up-stream" sales; i.e., sales outside of the regular channels of distribution. The ceiling price is established at the manufacturing level and must apply regardless of the number of middlemen who handle the product.

The above devices serve to briefly outline the method of control in the apparel field. The apparel field is only one of the many fields of control which concern OPA. It is, however, one of the most difficult, and while mistakes have been made the general picture is commendable. Control of ready to wear apparel is rapidly taking effect. The new devices have brought about the desired results.

CHAPTER VIII

CONCLUSIONS

In the previous chapters we have examined the history of price control, analyzed it objectively, and observed its operation in the war economy. The field, of course, is very expansive and in a survey of this nature it is only possible to scratch the surface of each individual phase. However, it has been possible to get a comprehensive picture of the field and from this certain generalizations can be drawn.

In the introduction we stated as opinion that price control was no cure-all, but that it did have value and could be made to work. After covering the preceeding material, this statement should have real meaning. Price control is complicated. Adequate results depend on many factors other than economic ones, but the important thing to note is that with intelligent planning and administration, it can be made an effective tool for government action. The past record has not been good, but this may be attributed more to lack of planning and experience than to inherent defects in the theory. The interrelationship of prices, the complexities of the economic system, make administration difficult, but these by no means preclude possibility of success. In the recent emergency we have seen a situation where price control was not only desirable but necessary, and under this stimulus,

proper study and preparation were made and price control did succeed. It is not intended that price control be prescribed as the medicine for every economic disease. However, under certain conditions it is a valuable tool. Unfortunately, it bears the stigma of its past failures, but the success in the present emergency may remove a large measure of the opposition.

From our discussion it is possible to describe two broad situations in which price control may be used. It may be used during a depression to mitigate the bad effects or it may be used in an upswing to avoid the serious consequences of inflation and subsequent collapse. Controls of the first group usually take the form of valorizations, government agreements, etc., and, as previously stated, are carried out in a seller's emergency. The problem in such instance is to prevent declining prices and hence raise prices to a level high enough to enable the sellers to break even. Unfortunately most of these schemes have met failure. In valorizations, producers have become antagonistic to the programs even though they have been carried out for their benefit. When prices have risen they are not satisfied that they can operate profitably, but rather oppose any form of surplus liquidation in the hopes of benefiting by a sharp rise in price due to short supply. In intergovernment agreement complete control of supply is not usually achieved, or when it is, nationalistic envy of one nation for another has usually resulted in failure. These failures can be attributed to a short sighted attitude on the

part of the participants. By no means do they prophesy that all future experiments will have the same results. If administered properly with the proper spirit behind them at the start, they should have a fair chance of success. The idea of a completely free system of prices, devoid of any control has definitely gone by the way. To say that during depression government interference in the price system will not work is not only untrue but inhuman. Certain measures are necessary to ease the hardships of depression and if in a given situation it is decided that price control may help, there should be no hesitation on that account. On a purely economic basis such control can succeed. The real problems lie outside the realm of economics.

Price control in the period of upswing is of comparatively recent origin. Under the present war conditions it has been used with fairly good results. In their efforts at keeping prices down, and distributing fairly, available supplies in accordance with standards other than monetary ability to buy, nations have been able to hold off, if not avert, the horrible effects of inflation. While success has been apparent during the war period the real test will come in the post-war era when the patriotic stimulus is removed. It is paradoxical that under the stimulus of war when one problem mounts on top of the other, economic considerations which make control successful hold sway, yet in peace when problems of administration would be so insignificant by comparison,

economic considerations are entirely disregarded. If price control is thrown out suddenly and we are left to the mercy of uncontrolled prices, inflation cannot be avoided. If, however, the change is made gradually, and controls are relaxed as goods become available, we stand a good chance of averting the evils of inflation. Here also we find that the success of price control depends on considerations other than economic ones. It is possible to determine by economic analysis what should be done in a given situation, but to carry this out effectively is a problem which also lies beyond the power of economics. It is a problem in administrative government. In a dictatorship it must be handled by the dictator; in a democracy it must be decided by the people and effectively administered by agency of the people.

It can be stated, then, that price control from a purely economic point of view can be imposed on the price system and be made to work. Just as it is possible for monopoly to interfere with the workings of free prices, so is it possible for governments to interfere to achieve their own results. The difficulties may be very much greater, but they can be achieved. Price control is difficult; it is complicated; but in view of recent trends in government, it is a device which is bound to be used more and more, and if properly carried out, it can be used as an effective tool by governments for the benefit of their people.

ABSTRACT

Price control as a tool for government intervention has been very much on the increase in the past decade. Inasmuch as the subject is so vital, particularly today in the war economy, it is wise to study it, examine its drawbacks and potentialities, and evaluate it critically, so that we may determine its effectiveness as an instrumentality of governments.

The idea is not a new one. Examples are found in the Code of Hammurabi, King of Babylon. In the Mosaic and Brahminic there are also examples. Plato, Aristotle, Xenophon, and other Greek writers discussed the subject in one form or another. Strong traces of the idea are to be found in the writings of the Church fathers during the Middle Ages. Indeed at the height of the power of the Church, regulation of economic life was the dominant theme inasmuch as it was a means to a more perfect spiritual life. This theme extended through the Mercantilistic period down to the industrial revolution, when under the influence of the writings of Adam Smith, the idea was discarded in favor of a policy of laissez-faire. With the dawn of the twentieth century control of economic life by governments was again taken up and has since been utilized in an increasing number of instances. Early experience in the present era of price control was not too successful. Valorizations and International Control Schemes

for the most part have been ineffective. In this country the N.R.A. failed miserably to achieve the purposes for which it was undertaken. In spite of these failures, price control has not been discarded. Under the stress of political and economic conditions it is being used more than ever before. In the present emergency it has been a must, and although it has taken a war to bring about wise application, it has been shown that by careful planning and administration, price control can be utilized to bring about desired results.

Obstacles to effective price control are numerous. In the past failures have been attributed to faulty economic reasoning. In many instances this has been true, but for the most part failures may be attributed to factors other than economic ones, particularly social and political factors. Within the past decade there has been intensive study of the theory and problems, so that there now exists a thorough understanding of the use and limitations of the device. From a purely economic view price control should work with a reasonable effectiveness. Unfortunately the political factors more often present insurmountable obstacles. Pressure groups with enormous power are able to sway government officials and bring about easing of controls for their own benefit. Easing of one control brings about easing of others until we have a gradual deterioration of the program. The fact that political considerations are readily placed before economic ones indicates that the force motivating government officials must be

a strong one indeed if price control is to succeed.

In the present emergency war has presented the necessary motivating force and political considerations have been put aside so that effective control has been possible. If this effective control is maintained in the post-war period, there is a reasonably good chance to avoid the evils of inflation. Unfortunately, however, indications are that once the war is over the necessary motivating force will not be present and political considerations will once again hold sway. To the extent that this trend continues to materialize our chances of avoiding inflation are so much the less. It is to be stressed, therefore, that any failure of the price control program is due not to any inherent defect in the program itself, but rather to factors outside of the program. Price control can be an effective instrument of government, but if it is to be subject to political footballing, there is little opportunity for it to succeed.

Rapid strides have been made in the present emergency in price control technique. Although we did not adopt the piecemeal system of World War I, we have a system vaguely similar to it. One might call it an integrated system of control. Starting from the allover control of "General Max" we finally evolved regulations for every industry in which they were needed. The general pattern of these regulations was the same, most of them utilizing the price chart device. These regulations, however, were basic. They were supplemented from

time to time as conditions demanded by other regulations which in certain provisions superseded the basic ones. MAP for example, was intended as a supplement to certain specific orders. In some respects its provisions work contrary to the specific orders, but where this holds true MAP usually supersedes. In any advent it is required that both orders be adhered to. The new technique has made possible an allover system of price control, containing specific orders for each industry and yet retaining a high degree of integration and coordination.

BIBLIOGRAPHY

Abramson, Victor and Lyon, L.S., THE ECONOMICS OF OPEN PRICE SYSTEMS, Brookings Institute, Washington, D.C., 1936.

Backman, Jules, ADVENTURES IN PRICE FIXING, Farrar and Rinehart, New York, 1936.

Backman, Jules, GOVERNMENT PRICE FIXING, Pitman Publishing Corporation, New York, 1938.

Baruch, Bernard M., PRIORITIES? THE SYNCHRONIZING FORCE, Harvard Business Review, Spring, 1941.

Black, John D., AGRICULTURAL REFORM IN THE UNITED STATES, McGraw-Hill Book Company, New York, 1929.

Black, John D., PARITY, PARITY, PARITY, The Harvard Committee On Research in The Social Sciences, Cambridge, 1942.

Cheyney, E.P., INDUSTRIAL AND SOCIAL HISTORY OF ENGLAND, Macmillan Company, New York, 1923.

Fairchild, Buck, and Wheldon, A DESCRIPTION OF THE NEW DEAL, Macmillan Company, New York, 1935.

Garret, Paul W., GOVERNMENT CONTROL OF PRICES, War Industries Board Price Bulletin #3, Government Printing Office, 1920.

Haney, L. H., HISTORY OF ECONOMIC THOUGHT, Macmillan Company, New York, 1940.

Hirsch, J., PRICE CONTROL IN THE WAR ECONOMY, Harper and Brothers, New York, 1943.

Kaleki, M., GENERAL RATIONING, Institute Of Statistics, Oxford Bulletin, 1941.

Keynes, J. M., HOW TO PAY FOR THE WAR, Harcourt, Brace and Company, New York, 1940.

Mill, John Stuart, PRINCIPLES OF POLITICAL ECONOMY, Appleton and Company, New York, 1880.

Richards, H. I., COTTON UNDER THE A.A.A., Brookings Institute, Washington, D.C., 1934.

Richberg, Donald, THE RAINBOW, Doubleday, Doran and Company, Incorporated, New York, 1936.

Rowe, J. W., MARKETS AND MEN, Macmillan Company, New York, 1936.

Spiegel, H. W., ECONOMICS OF TOTAL WAR, Appleton-Century Company, London, 1942.

Stein, H., GOVERNMENT PRICE POLICY IN UNITED STATES DURING WORLD WAR, Williams College, Williamstown, Massachusetts, 1939.

Taussig, F. W., PRICE FIXING AS SEEN BY A PRICE FIXER, Quarterly Journal of Economics, XXXIII, 1919.

Terborgh, G., PRICE CONTROL DEVICES IN N.R.A. CODES, Brookings Institute, Washington, D.C., 1934.

Whittlesey, C.R., GOVERNMENT CONTROL OF CRUDE RUBBER, Princeton University Press, 1921.

GOVERNMENT REPORTS

Federal Farm Board, First Annual Report

Quarterly Reports of Office of Price Administration

Special Office of Price Administration Regulations
RMPR 287, 330, 570, 578, 580
S.O. 108, 110.